contact with the French, he has been brought to take up a position which seemed to forbid mention being made of his latest larger works in § 344, 8 and 10. Already in the Modifications of Logic (Studies, Part III.), which appeared in 1846, Rosenkranz pointed out that some alteration would have to be made in the Hegelian Logic. These alterations he himself at length made in his System of Science, which he calls a philosophical Encheiridion (Königsb., 1850). It is a complete encyclopædia of the philosophical sciences, and occupies what is essentially the Hegelian standpoint, so that, according to it, philosophy, as the speculative science of the Idea, is divided into the philosophy of reason, of nature, and of spirit, i.e. into dialectics, physics, and ethics. The contents of the three sciences are indicated, provisionally, as follows. The Idea as reason, lays down Being as thought in the universality of the ideal Notion; the Idea as nature, lays down thought as Being in the particularity of material reality; the Idea as spirit, lays down Being as what thinks, and thought as actual existence in the individuality of subjectivity which knows itself to be free. With regard to the First Part, the dialectic, which treats of reason, we find that Rosenkranz has published this in a more detailed form in a special treatise: The Science of the Logical Idea (2 vols., Königsberg, 1858 and 59), the ideas of which agree entirely with those already given expression to in the Encheiridion. Since Rosenkranz, like Hegel, conceives of the Idea as the unity of the Notion and of its reality, he requires that its moments be treated of before it is taken up, and thus the doctrine of the whole Idea is preceded by those of Being and the Notion. The dialectic is accordingly divided into metaphysic, logic, and ideology. In the first of these the categories are treated of, which Hegel had taken up in his doctrines of Being and Essence; but besides these the doctrine of the End is discussed, since, according to Rosenkranz, the conception of end springs from reciprocity; hence, he thinks, Aristotle showed perfectly sound judgment in treating of final causes along with efficient causes. If the Metaphysic of Rosenkranz thus contains more than the first two parts of Hegel's Logic, he, on the other hand, wishes to exclude from the doctrine of the Notion and from the entire Dialectic a great deal which Hegel includes. Thus he would exclude the discussion of mechanism and chemism, which have to do with relations in Nature, and which could VOL. III.

be applied within the sphere of spirit only by a metaphorical use of language. Logic should therefore only contain the doctrine of the Notion, of judgment, and of the syllogism. In the same way in the last part, the doctrine of Ideas, which corresponds to Hegel's concluding chapter in the third part, instead of discussing the Notions of life, knowledge, and will, which belong to the philosophy of nature and to psychology, he discusses principle, method, and system, and from this, as a starting-point, he would make the transition from the logical Idea to nature. The supercilious tone with which some members of the Philosophical Society in Berlin described the alterations in the Logic which had been adopted by Rosenkranz after the most serious consideration, as "relapses,"-together with a reasonable feeling of impatience at the absence of any sign of appreciation of his efforts within the Hegelian School,—led him to write the Epilegomena to my Science of the Logical Idea (Königsberg, 1862), in which he states quite precisely his divergences from Hegel's Logic. If we turn back to the Encheiridion, and particularly to the Second Part, the philosophy of nature, the improvements in point of terminology at once impress us agreeably. "Physics" is taken as the heading for the entire philosophy of nature, and instead of physics, "Dynamics" is used to describe the Second Part. Still more important is the way in which the substance of the book has been enriched. Rosenkranz himself justly places the highest value on this part of his work, for it is the only attempt to construct a philosophy of nature on Hegelian principles which we possess. In the "elucidations" at the end of the work he refers to those men to whom he is most indebted for any advance he has made. these elucidations that the literature which has been excluded from the text is for the most part to be found.) He does not wish to create a new philosophy of nature, but to remain true to the principles and method of Hegel, and to work out in accordance with these the empirical data of which Hegel had not taken any notice. As regards the Third Part, the philosophy of spirit, the views he propounds in psychology are entirely in agreement with those which he had previously published on this subject, and therefore, too, with those of Hegel. He differs from him all the more, however, in the practical philosophy. He here includes in the first part, which treats of the Good in general, only the matter which

Hegel put into the introductory discussions. The second, which treats of abstract morality (Moralität), remains the same as it is in Hegel, in its examination of duty, virtue, and conscience. In the third part, on the other hand, which, as in Hegel, is headed "Concrete Morality" (Sittlichkeit), his divergence from Hegel is very great. Rosenkranz divides this part into three sections, of which the first, headed "Individual Law," treats of abstract law; the second, headed "Particular Law," of the family, the civic community, and the State; the third, headed "Universal Law," and "History of the World," of the national state (of passive peoples, active peoples, and free individuality), of the theocratic state (of the Jews and Islam), and of the state of humanity. "Absolute Spirit," or theology, forms the conclusion of the philosophy of spirit. Under this heading, he discusses the Beautiful and art, the Sacred and religion, the True and science, and shows how the history of philosophy constitutes the conclusion of the How strong, in spite of many important divergences from the views of the master, Rosenkranz's reverential feeling of indebtedness to Hegel remained, is proved by two works, the second of which was composed a year and a half after the first, and completed under great difficulties occasioned by a serious eye complaint. The first, entitled, Hegel's Philosophy of Nature, etc. (Berlin, 1868), is at the same time an account of the version of Hegel's philosophy of nature by the Italian philosopher A. Véra, who translated it from the Encyclopædia, and published it in three parts accompanied by a commentary (Paris, 1863-66.) The two last sections of this work call for special attention here. They contain some reflections in opposition to Hegel and Véra, and give expression to Rosenkranz's views on the systematic organization of the Sciences of nature. constantly referring to the assertions of modern empiricists, he directs attention to the great importance which the place in which anything in the system is treated of has in reference to the Notion belonging to it; and he calls for certain alterations in the arrangement of the Sciences which are based on reasons which are for the most part taken from Hegel's own declarations on the Subject. These are in the main the alterations which Rosenkranz had proposed in his System of Science, only that here the terminology is often somewhat altered. According to his ideas, the science of nature ought

to represent nature to us as the Absolute in the externality of its existence, and to show how it is first of all unmediated matter, and how, owing to the fact that the various masses exist in a condition of separation, it possesses unity outside of itself in the form of gravity. This part he describes as formal, real, and absolute mechanics. In the second place, nature, as seen in dynamic opposition to its externality, is force, which renders possible the reciprocal action of bodies. (This is physics; and in the System of Science, dynamics. While in the other work the first section which treats of the specification of matter, of its cohesion and disintegration in sound, heat, and light, was entitled mechanical individualization, Rosenkranz here proposes to adopt the name synechology. The second section would treat of magnetic, electric. and chemical polarity, and the third section of the meteorological process.) Thirdly, nature is life, and as such is the subject of Organics. As was done in the System of Science, so here, too, the moments contained in the conception of life. namely, self-formation, self-conservation, and the feeling of self, are made the basis of the division, and in accordance with this a distinction is drawn between the geological, vegetable, and animal organisms. The arrangement departs from that of the System only in so far as life in general, as taken up in biology under the divisions of anatomy, physiology, and morphology, is treated of before the three special forms in which life appears. Further, in accordance with this arrangement, the sum-total of life is discussed in the third part of the Organics, in somatic anthropology, which Rosenkranz had previously placed outside of the circle of the sciences. One cannot but feel grateful to Rosenkranz, that he did not agree to the proposal of the publishers to remodel his Life of Hegel in view of the latter's jubilee, but wrote, instead, his delightful book: Hegel as Germany's National Philosopher (Leips., 1870). The same warmth with which in his Apology he rebutted the disparaging remarks made on Hegel's character as calumnies, is maintained in this book when he returns to Haym's "caricature." It does not prevent him, however, from searching with critical thoroughness into the past for the first germs of Hegel's theories, nor from reminding us of such writings, or even of such utterances of Hegel's, as seemed already to have been forgotten. There is, perhaps, no Hegelian who is so familiar with everything which Hegel

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has written as the author of this jubilee work. Any one who, like the author of these Outlines, regards the opinion which any writer pronounces upon Hegel's Phenomenology as the criterion by which to judge whether he is capable or not of rightly appreciating Hegel, will, if he reads p. 85 ff. in Rosenkranz's book, best assure himself of the correctness of this criterion. Since here, too, the genesis of the Hegelian system is presented to us and described in its embryonic form, and since we are further shown what form it takes in the "difference" of the "Phenomenology," there could hardly fail to be repetitions of what had been said in the biography. Partly, however, owing to the more concise form, and partly to the consideration of disputed questions which did not emerge till after the year 1844, what had been previously written is constantly taking a new shape. In this work, Hegel's connection with Kant is emphasized to a much greater extent than in the Life of Hegel, and he is repeatedly described as one who really continued Kant. Rosenkranz does not here altogether succeed in avoiding the rock which also Stirling, whom he justly praises, did not escape in his otherwise so admirable work, The Secret of Hegel, in that Fichte and Schelling are put far too much into the background. This is seen, for instance, in the discussion on the dialectic method, which Hegel himself often traced back to Fichte. The examination of what Hegel understands by absolute spirit supplies him with an occasion for expressing his views on pantheism and theism. In referring to the position which Hegel occupies, not only in German literature but in the literature of the world, he again gives expression in his jubilee work, as he had previously done in the preface to his "Véra," to a noble feeling of anger roused by the fact that while with us every translation, even of entirely unimportant English works, is loudly trumpeted abroad, the circumstance of Hegel's being translated into French or English is taken absolutely no notice of, and is even industriously concealed. book, too, Rosenkranz does not attempt to conceal the points in which the master seems to him not to have fulfilled his own requirements. Although, since the last words were written, the most severe blows of domestic affliction, and amongst these, total blindness, have fallen upon Rosenkranz, he has not given up his communications to the reading public which have come to be so much appreciated by both sides.

His charming and instructive autobiography, From Magdeburg to Königsberg (Berlin, 1873), was followed by three volumes of New Studies (Leips., 1875-77) on the history of literature and culture. The latter had been previously published; but the short articles containing reflections on various subjects, with which he accompanies them, show not only what position he takes up in reference to what is said in them, but constantly afford us new proofs of the spiritual freshness of the man.

12. While Rosenkranz might complain that he has not here been placed amongst the Hegelians,—and if he had, he would have got the first place,—an expression of Ernst Kuno Berthold Fischer's (born July 23, 1824; for many years professor of philosophy in Jena, and since 1872 in Heidelberg) seems to protest beforehand against his being placed too close to them. "It will be found," he says in the year 1865, in the preface to his Logic, "that I have gone my own way; and if this conducts me to a goal where I do not stand alone, but where I occupy in the main an already historically given standpoint, I regard this agreement, so far as it goes, as in no way expressing dependence, least of all that implied in belonging to a school." In spite of this, he must be content to have his present standpoint regarded as a modification of the Hegelian position. He was introduced to the Hegelian philosophy at a time when it had already broken up into two mutually opposing sides. Already in his doctor's dissertation (De Parmenide Platonico, 1845) he showed that he had the ability of identifying himself completely with a theory by the discovery of its salient points. His next work was on æsthetics: Diotima, The Idea of the Beautiful (Pforzheim, 1849), in which there are so many points of contact with the views expressed by Ruge and Vischer that it has been described as a further exposition of these. Fischer next exchanged the vocation of a tutor for an academic chair. The unusually successful activity begun in Heidelberg came to an end after the first half of the first volume of the work cited in § 259 had appeared, owing to the withdrawal of his lectureship in consequence of an intrigue. During this time, the first edition of his Logic and Metaphysics, etc. (Heidelb., 1852) had appeared. While filling the professor's chair in Jena, he produced, besides his larger historical works, some historical and æsthetic essays. these, the monographs on Schiller, on Lessing's Nathan, on

Shakespeare's Richard the Third, on the lives of Spinoza and Kant, on Joh. Gottl. Fichte, on the two Kantian Schools in Iena, and on wit, may be cited.) Besides these, however, he issued his System of Logic and Metaphysics, or the Theory of Knowledge, in a completely altered form (Heidelb., 1865), the substance of which we intend to refer to here. The fact that there are empirical sciences and mathematics requires. like every other fact, an explanation; and this is supplied by philosophy, which is accordingly a theory of the science of knowledge. It thus takes up its standpoint within experience, and not beyond it. The part of philosophy which treats of the forms of cognition is logic, which, just on this account, is the doctrine of Notion. Since all the notions which are given presuppose certain original syntheses, original pure notions or necessities of thought, these, i.e. the categories, are the first rules of thought to be considered, without which even perceptions themselves are not possible. From the latter, again, we form new notions by means of abstraction. With this, the question as to the problem of logic, to which the first section of the Propadeutic is devoted, would be Two other questions, also answered by the Propadeutic, connect themselves with the first, namely: In how far is this problem already solved? and, How is it to be solved? The former question is answered by the history of logic, the latter by the doctrine of method. As the Sophists, in ancient imes, by denying the possibility of knowledge, made it into a problem the solution of which was begun by Socrates and completed by Aristotle, just so, in modern times, Hume, driven to it by the opposition between empiricism and rationalism, stated in his scepticism once more the problem: What is rational knowledge? It is in the solution of this problem that Kant's merit consists. Logic made no advance between the time of Aristotle and that of Kant. Fischer gives a very full account of the logic of Aristotle, and seeks to show that his followers were the first to turn his logic into purely formal logic, because, in treating of the forms of thought, they disregarded their value in relation to knowledge. In Aristotle himself everything stands in the closest relation to the principal question, or, if you like, the only question, namely: the correct determination of notions, i.e. definition and proof. Since these are syllogisms, syllogisms must be considered; and since among these the first figure is the only scientific one,

the reductions and therefore the conversion of judgments, the quantitatively and qualitatively different judgments, their component parts, etc., have all to be considered. In short, nothing in the Organon is useless, if we reflect on the distinction between apodeictic and dialectic. If we pass over what Fischer, following for the most part the suggestions of Prantl, has to say of the later modifications of logic, and consider how he expresses himself regarding Kant and the moderns, we find that he points out how the opposition between empiricism and rationalism is, -not negatively, as in the case of Hume, but positively,—removed in the doctrine of the categories, since here, on the one hand, notions make experience possible, and on the other hand, make nothing possible but simply experience. The further course of thought on this point, is as follows: These conditions of experience are either taken as facts, as by Fries, or as actions, as by Fichte, who discovers, besides, that contradiction compels us to go further—a thought with which, though only by way of opposition, Herbart and Hegel have connected their speculations. Fichte's one-sidedness, particularly reference to the conception of nature, calls out the System of Identity, which, by identifying thought and being, becomes of decisive importance for logic. In opposition to Schelling's System of Identity with its "geniuses," which, moreover, by its very existence, refutes the view that all knowledge is intuitive perception by genius, Hegel sets up his "rational" system, in which, what with Schelling formed the startingpoint, viz., reason as the unity of the subjective and objective, constitutes the conclusion. In contrast to these theories of identity views could have established themselves and have really established themselves, in which identity is either denied, as is done by Herbart, or differently conceived, as is done by Schopenhauer, and, in a peculiar way, which approaches in some points to Herbart's system, by Trendelenburg (vid. infra, § 347, 7, 8). Both are very fully treated of, especially the latter, "because he, almost more than any other in recent times, has the merit of having once more made the most important question of philosophy the order of the day, and of having attempted its solution in a way which was intended to avoid the deficiencies in the solution given by his predecessors." Of both it is further said, that if their theory had been correct, their systems could not have been set up,

a style of criticism of which Fischer seems to be fond, since he has employed it not only in reference to Schelling's System of Identity, but also in his large work when speaking of Spinoza and Leibnitz. With regard, finally, to Trendelenburg, Fischer partly attacks his positions and partly defends those who had been attacked by him. He shows that the move-ment which, according to Trendelenburg, is to mediate between thought and being, does not succeed in doing this, because there are two sorts of movements of which now one and now the other is spoken of; that, further, it is not the original category; and finally, that it does not suffice for the deduction of the categories. He attacks in a very energetic way Trendelenburg's (certainly very astonishing) assertion, that Kant never attempted to prove that time and space are simply subjective forms of perception. Trendelenburg replied to this in his Kuno Fischer and his Kant (Leipsic, 1869), and Fischer retorted in his Anti-Trendelenburg (Jena, 1870). Then, finally, he seeks to defend Hegel against Trendelenburg's criticism, that, inasmuch as the former only comes to his categories by starting from perception, or bases his reasoning upon it, they ought not to be called forms of pure thought. Trendelenburg here overlooks the difference between pure thought, which first makes the perceptions possible and produces them, and discursive thought, which is subsequent to perception and by which we become conscious of the categories; and hence his objection rests on a confusion between the principles of reality and those of knowledge. With this criticism he at once passes on to the last section of the Propædeutic, which deals with the method of logic. Since its task consists in reproducing the original, i.e., natural and necessary, products of thought, the course it follows takes the form of a continuous series of problems of thought which present themselves of their own accord and are solved. The method in which these are presented does not take the form simply of a genetic development, but of a development which is something more than genetic, namely, philosophical, which includes the genetic, while dialectic construction ex-Fichte was the originator of this true method. cludes it. In the development, cause and end, necessity and freedom, reality and Idea coincide. The philosophical development of the categories must be divided into three parts, which treat of Being, of ground or Essence, of end or Notion, because

to development there belongs first what is developed, secondly the ground from which it is developed, and finally the end which the development has in view. The second book, the System of the Categories, i.e., logic proper, is divided into these three sections. In the first section,—the doctrine of being (quality, quantity, measure),—the fact that Fischer presents contradiction as existing, not so much in the notion as thought of, as rather in the thinking of a notion, has to be specially pointed out as constituting the principal divergence in his account from that given both by Hegel and by Hegel's disciples. By means of this contradiction, what has to be thought, because it cannot be thought (in this way), becomes a problem, the solution of which supplies a new notion and a new problem. The energy with which he carries on a polemic against other ways of representing the movement of thought, shows that he places great importance on these alterations. After the question of the first part: What is being? has forced him by constantly raising new problems to come to the question: How are we to think of the unity of all existence, a unity which must be thought but which cannot be thought of as measure? there results the answer, that it is to be thought of as the basis of existence. This, again, raises the second and deeper cardinal question: What is the essence or the ground? The notion of the ground constitutes the subject of the second section. The three chapters into which it is divided are headed: "Essence as Relation," "The Phenomenal," "Reality." As statements quite peculiar to him, which do not occur in other manuals by members of the Hegelian School, we might cite particularly those in this section in which, attaching his theories to the doctrine of the relations of measure, he defines essence as the connection of things; and further, those statements which have reference to the relations of possibility, actuality, and positive and negative necessity. By means of the notion of self-realization, to which in the end all necessary relations point, the transition is made to the third section, to Notion and End. Here at length, and particularly in the first chapter which treats of the subject, Fischer takes up a most decidedly polemical attitude towards Hegel and his School. The careful study of Aristotle's Organon brought him to adopt the view that the Hegelian Logic is defective in the doctrine of judgments and syllogisms. He considers it defective just because Hegel sought

to bring it into harmony with formal logic, i.e., with the logic which leaves out of account the value which the forms of thought possess for knowledge. Hence the departures from the rhythm of method, etc. (the blame of which is without further ado laid even upon those Hegelians who sought to avoid them). The right thing to do is always to keep in view the fact that judgment as determination of the notion has for its final aim simply correct definition, and therefore stands the higher the more it contributes to this. In accordance with this,—because the determination of the notion demands, first the specification of the genus, and then the more exact specification of the part of the predicate in which the subject is included,—a distinction is drawn between the judgment of simple subsumption, of specification or division, and the disjunctive judgment, or the judgment of complete subsumption. The transition is then made by means of the hypothetical judgment, i.e., the judgment which is established only conditionally, to the judgment which has been established by proof, or the syllogism. Since this is only a mediated judgment, of course the sequence of judgments and syllogisms corresponds. But after the syllogism of subsumption has been treated of, he takes up its development in a separate section, so that really the numbers 3, 4, 5 in connection with the syllogism, correspond to the numbers 2, 3, 4 in connection with the judgment. (The polemic against other ways of representing the movement of thought which pervades the whole of this part, is based particularly on the view that the positive categorical judgment expresses simple subsumption, while the negative judgment, exactly like the divisive judgment, stands higher as judgment of specification, and is not to be regarded as the correlate of the former, as those do who figure with notions instead of considering their worth for knowledge. So, too, the disjunctive judgment stands on a different plane, and ought not to be put on a level either with divisive or categorical judgments, as Trendelenburg and Herbart do. Some Hegelians are much more harshly rebuked even than these two.) In the most complete syllogism definition attains its perfect form, and by means of its practical character points to realization, and thus enables the transition to be made to the following chapter, which treats of the object. The Hegelian school will scarcely lodge a protest against this, or against the last chapter, which treats

of the Idea or self-constituted end. The fact that Fischer speaks of self-constituted end as development, where it is the custom of Hegelians to speak of the absolute Idea, does not make any very important difference, since the absolute Idea is also for them simply the "end which realizes itself." It is to be hoped, however, that no one will be found in the Hegelian school who is not willing to subscribe to the statement with which Fischer concludes his preface: "There are two things in philosophy which we cannot neglect with impunity, the Aristotelian logic and the critical philosophy, I mean the philosophy of Kant." By the continuation of his Schelling, which it is reported he will soon give us, Fischer will prove anew to his readers as he has already done by his academic commemoration address On Freedom, and his Lectures on Goethe's Faust, that he can study and speculate on the Neckar as well as he did on the Saale.

13. Almost simultaneously with K. Fischer, Georg Weis-SENBORN (born in 1816; died June 4th, 1874, when professor at Marburg) came before the public. But while Fischer's personal respect for Feuerbach, and his friendship with Strauss were not without influence on his development, Weissenborn received the first impressions which had a determining influence on his mind from the Right Wing of the Hegelian school, and also, quite as much, from those admirers of Schleiermacher who were inclined to orthodoxy. After having published his lectures on Schleiermacher, which had been delivered in Halle, and which were referred to in § 315, his Logic and Metaphysics (Halle, 1850) appeared. In this work he expresses the opinion that of the two parties which he can distinguish in the Hegelian school, the conservative and destructive, the former has certainly the more comprehensive and more profound amount of truth, but that the latter, on the other hand, certainly has the authority of Hegel on its side. The views held by the latter could really be successfully refuted, if the Hegelian philosophy, and particularly the Hegelian logic, were by means of an immanent criticism pushed beyond itself. He accordingly makes an attempt in this direction. The difference between him and Hegel in the first part of the Logic is by no means so great as it is in the second, and particularly in the third part. Weissenborn here not only, like Rosenkranz, drops out of the Logic mechanism and chemism, but also the relation of ends, i.e., everything that Hegel had treated of under the head of objectivity, because it belongs to the philosophy of nature. He, moreover, separates the doctrine of the notion from that of judgment and syllogism, while the two last are taken up in the doctrine of the Idea of cogni-In connection with the Idea of action, character is discussed, and finally, absolute personality. As Weissenborn had already declared in this work that his efforts were specially directed towards the refutation of pantheism by setting up a theism on a scientific basis, his later work showed that he had remained faithful to this plan. It is entitled Lectures on Pantheism and Theism (Marburg, 1859). In the first part the main forms of pantheism are distinguished as the mechanical or materialistic pantheism of the French, the outological pantheism of Spinoza, the pantheism of Schleiermacher, the dynamic and psychical pantheism of Stoicism, the ethical pantheism of Fichte, and the logical pantheism of Schelling and Hegel. He allows that the last-mentioned contains the truth of all the other forms, but he at the same time also asserts that it does not satisfy the religious needs of man's nature in all cardinal questions. He then passes on to theism, with whose different forms the second part is occupied. Jewish theism, deism, supernatural theism, the theism of Jacobi, and finally the theism of the identity of the nature of God and the world, are represented as the preliminary stages of Christian theism, each of which surpasses the other. This Christian theism is theism in its perfectly true form. By way of conclusion, he takes up the conflict between Christian theism and modern science, and points out that there is no such conflict, since Christian theism is not afraid of Science, particularly of the science of nature, any more than it is of Art.

14. Moritz Carrière (born in 1817; professor first in Giessen and then in Munich) was a contemporary of Weissenborn's, and in many points has followed a path similar to that taken by him and by Kuno Fischer. His inaugural dissertation, De Aristotele Platonis Amico (Götting., 1837), betrayed the fact that he was an ardent admirer of Hegel. This was followed by some smaller works, among which may be mentioned that entitled Of Spirit, which is addressed to Franz Baader; and also the Studies for a History of the German Spirit (1841). They give evidence of the workings of a youthful mind, which intercourse with Bettina hardly cooled. A wholly different impression is made by the work on the Reformation

period referred to in § 226, which was the result of a sympathetic and profound acquaintance particularly with the mystical notions of that time. The fact that some thought they could discover pantheistic touches in this work is easily explained by its subject. Besides, Carrière declared even at that time, that what he wished to do was to reach a position above pantheism and dualistic deism; and he subsequently indicated that his position was allied to that of Weisse, or to that of the younger Fichte; and besides these, he further referred to Úlrici and Wirth, whose views will be mentioned further on, as kindred spirits. We see proof of this in the anonymous work, Religious Addresses and Meditations for the German People by a German Philosopher (Leipsic, 1850). The religion, or rather the want of religion, of the present day, forms the starting-point of these Addresses, which are often interspersed with poetry. The extremes which are directly specified as requiring to be reconciled, are rationalism and supernaturalism, pantheism and atheism, although the representatives of the two last named, Hegel and Feuerbach, are treated with respect. The being of the triune God, God in nature, man, freedom, sin, regeneration, the Fall, and the dispersion of the various peoples, Christ in ancient times, or, the prophetic period of the nations, the life of Jesus, the Holy Spirit, Christ in the history of the world,—what is said under this head consists partly of the thoughts of an imprisoned republican which had been communicated to him, - Christianity and the Germans, dogmatics, scholasticism, mysticism, the Reformation, Christian art, the rational consciousness and philosophy, the Christian state, the perfection of life,—are the subjects which are discussed in these often somewhat too declamatory Addresses, given in the spirit of a poetical modernized Christianity. Already here he shows that he has a special preference for the discussion of Art. The Nature and Forms of Poetry (Leipsic, 1854) is entirely devoted to this subject. In this work Carrière endeavours to show that the comprehension of Art is possible only when we have a theory of the universe, which rises above pantheism and deism by means of the Idea of the living God, who has nature and history within Himself, and who reveals Himself in both. development of the Beautiful and of Art in general in accordance with their notions, of poetical works of art in particular, and of the epic, lyric, and dramatic methods of representation,

he adds by way of literary and historical elucidations a comparison of the national epics of various peoples, reflections on Goethe, the greatest lyrical poet, and an estimate of Schiller, our first dramatist. Carrière did not, however, confine his æsthetic studies to the domain of poetry. His Æsthetic (2 vols., Leipsic, 1859. Second revised edition, id., 1873) gives an account of the Idea of the Beautiful, and of its realization in nature, spirit, and art; and the book is so arranged that in the First Part he discusses the Idea of the Beautiful, the Beautiful in nature and spirit, or the matter of Art; fancy and the artist, or the Beautiful in the subjectivity of the constructing spirit; finally, Art and works of art. In the Second Part he treats of the division of the arts into constructive art, music, and poetry; and each of these is further divided into three forms. As some of the men had done whom Carrière mentions in this work as his comrades in spirit and aim, he too declares that the intended bearing of his speculations was what was described at the beginning of this section as the destined work of the post-Hegelian philosophers. philosophers," he says, "do not wish to set up any school, but to lead men to engage in free investigation. The time of the school philosophy is past, but philosophy has not itself passed away; on the contrary, it is beginning to become a science of In opposition to Vischer, against whom, particularly in the first part of the book, Carrière conducts a pretty constant polemic, he emphasizes the fact, that from the pantheistic standpoint we are unable to understand not only the Beautiful in nature, but the Beautiful in general. Speaking generally, the real work of philosophy is to unite transcendence and immanence. To do this in the department of æsthetics, and,—just as the scientists delineate the picture of the Cosmos by means of the united efforts of many investigators,—to advance truth together with those who seek to do the same in the domain of ethics, psychology, etc., is the task which Carrière sets himself. Just because of this, many for whom a new theory of the universe and a new system mean the same thing, have come to regard him as an able and well-informed eclectic. already in his Asthetics drawn attention to the fact that the history of Art stands in as much need of being treated philosophically as any other department of thought. himself attempts in Art in connection with the Development of Culture and the Ideals of Humanity (five volumes, the first

of which came out in a second edition, 1874, before the completion of the last. Leipsic, 1863, 66, 68). In the preface to this work he places himself on the side of those who do not see any logical necessity in history, and accordingly reject any purely rational construction; but at the same time he asserts that he objects to the purely empirical way of treating history, and calls for some attempt to understand it. In accordance with this, he begins with what is pre-historic, with the origin of language, of myths, and of writing. He then passes on to consider the various peoples in a state of nature, between whom and the civilized peoples stand the Chinese with their patriarchal principle. The civilized peoples at once present us with the great contrast of Semites and Aryans, of whom the former are in a special sense the representatives of the religious idea, while the latter, on the other hand, established the idea of the Cosmos in nature and history, and are accordingly the representatives of the State, of Art, and of Science. Both tendencies,—the subjective tendency of Semitic thought and the objective tendency of Aryan thought,-appear undivided in the first civilized people, the Egyptians. In connection with the Semites, ancient Babylon, Nineveh, and Assyria, New Babylon, Phœnicia, and Israel, are fully described, as regards their language, religion, and æsthetic development. Carrière then passes on to the Aryans; and in connection with these he takes up India and Iran, treating of the former very fully, and of the latter briefly. The second volume comprehends Greece and Rome, and "carries on this philosophy of history from the standpoint of æsthetics" through the various periods of Hellenic and Roman life. In treating of Greece, he begins with pre-Homeric times, and comes down to Alexandrian literature, making a thorough survey at once of history, religion, and the arts. In treating of Rome, he begins with the ancient Italians and Etruscans, and comes down to the fourth century after Christ; so that the volume concludes with the struggle between Neo-platonism and Christianity, specifically, with Proclus. The third volume treats of the Middle Ages, beginning with Christian antiquity; and the intention here is to bring out the æsthetic truth of the Biblical narrative. A survey of the struggle and victory of Christianity is then given, and it is further shown what forms poetry, Churchmusic, architecture, and painting have taken in accordance with Christian ideas. He concludes this section with a review

of the Byzantine period, while Islamism is taken up in the following section. Mohammed's life, and the Koran, the literature and architecture of the Arabians, the modification of both in Spain, and, as an episode, the poetry of the Jews, and finally, the new Persian poetry,-make up the contents of this part, which closes with Firdusi's epic, and with lyrical and gnomic poetry. The European Middle Ages are taken up after these two sections; and in the fourth volume Carrière discusses the Renaissance and the Reformation; while the fifth is occupied with "the age of the dawn of spirit," namely, with the eighteenth and nineteenth centuries. In the introduction to this last volume, the course of investigation pursued in the entire work is summed up as follows: "We have seen how humanity, in the beginnings of civilization, was under the dominion of nature, how it gave form to the divine element it perceived in the appearances of nature, and how it realized the natural ideal in Greece and Rome. Jesus and Mohammed next announced the doctrine of a spiritual God. New nations with a predominating power of feeling adopted this religion; and from the traditions handed down from the ancient world there sprung a new art, in which the ideal of feeling took form, and painting and music came to predominate, just as the architectonic arts had held sway in the East and the plastic arts in Greece. We have regarded the Middle Ages in this light, as well as the period of the Renaissance and the Reformation. Cartesius introduces us into an age of spirit. If this age were to dawn, and if its ideal were to be represented, science would now become the basis and condition for modern art, exactly in the same way as in former times the popular mythology, and afterwards revealed religion, first gave expression to the ideas which were afterwards illustrated by poets and sculptors. . . . bold idealism will construct the world out of itself, or allow it . . . A period of predominating to reflect what is within. realism will complete the foregoing period. Ideal-realism is the goal which is thus set before us." Carrière's latest work, The Moral Order of the World (Leipsic, 1877), "supplies the scientific development of the ideas which underlie his works on Art, Religion, and History; it is the slowly ripened fruit of studies in these departments, a theory of life which has been won and verified in joy and sorrow." After a patriotic address, which was delivered in a popular assembly, on the 3rd of September, 1870, and which is put in by way of introduction, he goes on VOL. III.

to treat of the following subjects in twelve sections: (1) "The Mechanical Order of Nature and the Materialists;" (2) "Idealism." Experience, as well as the assumptions which are necessary to thought, prove the one-sidedness of both materialism, and idealism, and thus establish the correctness of real-idealism, the outlines of which are developed in the third section, while specimens of it are given, taken from Carrière's own works, but especially from the works of Fichte and Ulrici. There follows: (4) "On the Idea of Perfection, and of what Ought to be." In this section, as well as in the following one, "On Freedom and Law," amongst those with whom Carrière comes to find he can agree, Ulrici in particular is frequently quoted. The latter's ethical categories, as well as the distinction he draws between these and ethical ideas, are gratefully adopted by Carrière; and even where he combats Ulrici's positions, he entirely agrees with him as regards the final conclusions to which Ulrici comes. § 6, "The Good and the Evil," as also § 7, on "Statute Law and the State," unite with their ethics a history of ethics, and show, still more than the previous sections Carrière's tendency to represent himself as in agreement with the most entirely different views, though of course this agreement is qualified by slight alterations. tendency has led many to call him an eclectic. In § 8, "The Upward Course of Life in Nature and History," he goes on to discuss Darwinism. Carrière modifies it in a twofold way, partly by an approach to Kölliker's idea of heterogeneous production, but especially by resolutely holding to the teleological point of view. He compares the origin of a human cell in the highest form of existence beneath the human, which undoubtedly presents us with something which is of the nature of a leap,—with the appearance of the most famous heroes and men of genius, a phenomenon which is equally of the nature of a leap or bound. By thus arranging these subjects, Carrière is able to pass at once to the philosophy of history, the substance of which he briefly indicates by referring the reader directly to the work on Art which has just been characterized, in which the periods of nature, of feeling, and of spirit stand out as constituting the essential stages. In § 9, "The World-sorrow and its Conquest," he attempts to reconcile pessimism and optimism, and recognises the consolation which can be got from the hope of another life. Although its existence cannot be proved, either from experience or

necessity, it ought not on that account to be called a blessed delusion. § 10 treats of "Art," which represents what ought to exist in existence, and which therefore has the moral order of the world as the peculiar subject with which it deals. § 11 treats in the same way of "Keligion." A survey of the various religions, amongst which a specially high place is given to Islamism, proves that the feeling of being dependent on the moral order of the world and of being lifted up into it, constitutes the real essence of religion, the putting of which in a dogmatic form, might well be regarded as a matter of indifference, if not even as dangerous. The last section is entitled, "God." In it he develops the theory of the World-Ego, to which we stand related just as our ideas are related to our Ego, and the theory of the primal force which eternally realizes itself in the original forms in which the Absolute manifests itself, and which are partly simply centres of force and partly souls. These are neither to be thought of in a pantheistic way as losing themselves in the many, nor in a deistic way as existing outside of them.

15. It is interesting to see how the Hegelian philosophy was modified when, particularly owing to the academic lectures of Werder and Michelet, thinking Poles come to be acquainted with it, who at the time were beginning to be influenced more or less by Panslavic ideas. Among these, August Graf von Cieszkowski takes the first place. In accordance with the design of this Appendix, of course only such of his works as are written in German will be mentioned. We may therefore first refer to his Prolegomena to Historiosophy (Berlin, 1838), in which he finds fault with the Hegelian philosophy of history, on the one hand for departing from the method of division according to trichotomy, and on the other, for excluding from its consideration the future, which cannot certainly be known so far as its details are concerned, but can at least be known in its essential nature, as the solution of what was unsolved in the past. According to Cieszkowski, history is divided into the thetic period of antiquity, the antithetic period of the Christian-Germanic world, and finally, the synthetic period which is now beginning. These three are related to each other as mechanism, chemism, and organism, as law, morality, and the ethical state, as feeling, knowledge, and will. The knowledge that history presents these three moments not only successively but also

side by side, is the true historiosophy. The task of this historiosophy is to establish a table of categories of the history of the world; and in accordance with this, all logical categories are not only to be rediscovered by a process of analogy in the course of history, but are actually to be sought for there, as Montesquieu did with cause, and others with certain of the relations of number. The same method is to be employed, further, in reference to all physical categories (as, for instance, we find mechanism in China, light in Persia, etc.), and finally, in reference to all anthropological categories, such as age, etc. For this there is required a psychology of the various peoples; and hints towards a construction of this have been given by Condorcet and Kant. Thus, the history of the world is what stands above everything else, while above it again stands God, who presides over the judgment of the world, as Augustine and Bossuet rightly surmised. Cieszkowski believes that he is justified in making all these demands of Hegel as the logical outcome of his system. But he demands in addition to this, that we go beyond Hegel's system. Neither Schiller by glorifying Art, nor Hegel by his apotheosis of consciousness and science, has succeeded in laving the foundation of the peculiar teleology of history. we have got to do, is to bring the will to the same position of prominence to which speculative reason was brought by Hegel, and thus to give the ruling place, not to pre-theoretical but to post-theoretical practice, so that the history of the world is constituted, not by instinctive but by conscious actions. The philosophy of practice must therefore also take the place of contemplative absolute idealism; the objective dialectic of life must do away with the contradictions of the time, and bring us to what is the highest practical result—to humanity as a family of nations. This work is in many points closely connected with that by the same author, entitled God and Palingenesis (Berlin, 1842), in which he recognises the merit of Michelet's book on the personality of God and immortality, and states that it consists particularly in the fact that these two questions were united together. He next seeks to correct the indefiniteness of the Hegelian expression "particular," which was noticed above (§ 335, 4), and then, by distinguishing between particularity or individuality, universality or subjectivity, and totality or personality, he ends by denying immortality to the two first, and by vindicating it for the last

as being its well-earned possession, on the ground that it is its own act. As here, the philosophy of action and life, with which the Slavic period of philosophy begins, carries us beyond the abstractions of the Germanic absolute idealism, so it does in reference to the doctrine of God, in which Michelet does not get beyond the idea of objective spirit. Indeed, in order to do this, he would have had to get above abstract speculation, which takes up simply a negative position in regard to ideas in a pictorial form, and would have had to place himself on the standpoint of active intuition, which is the organ of the philosophy of life and action. Along with Cieszkowski, we may mention STAN. FERD. TRENTOWSKI, who lived for a long time as an exile in Freiburg, where he gave lectures. In his Basis of Universal Philosophy (Carlsr., 1837), and his Science of Nature (1840), he seeks to go beyond Hegel to the extent of uniting the Cartesian principle cogito, ergo sum with the sensualistic principle sentio, ergo res est, as all true and thorough philosophers have done, even though it was only in the way of having solitary glimpses of the truth. He crowns his speculations with the animadverto ergo Deus est, which is the result of such a union. concrete philosophy is to be divided into essential, formal, and essential-formal philosophy, and each of these is to be divided into three departments of thought. The first includes the philosophy of nature, of spirit, and of God, as He appears to us; the second comprises grammar, logic, and mathesis, together with æsthetics; and the third, the criticism of experience, reason, and perception. Trentowski's educational works, which are written in Polish, are highly prized by his countrymen.

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1. Those who, as soon as they became acquainted with a system, imagined that they detected its one-sidedness, and accordingly sought at once to supplement it with what would remedy this defect, form a much more numerous company than the group of those who took as a starting-point one only of the systems which had been previously founded. This makes it still more difficult for one individual to give a general idea of their speculations. The idea of the necessity of supplementing systems was first advanced by those who sought to steer between the rocks of the System of Identity

and the Science of Knowledge, and above all by Hegel. It is therefore not a mere accident if, in the theories about to be mentioned here, one at least of the integral elements is always one of the systems of mediation which were taken up in § 322, or one of the final systems which were referred to in § 326, 3, and if they all more or less take account of Hegel. On the other hand, however, the Hegelian system, by representing itself as the final stage of all previous development, rendered the consideration of earlier theories so necessary that in the case of many of the philosophers mentioned in the foregoing sections, as, for instance, Carrière, one may often doubt whether they ought not rather to have been taken up in this section.

2. The great reputation which Hegel and Schleiermacher enjoyed as academic lecturers gave rise to a desire among many of those who attended the lectures of both, to unite the views they had heard stated by each. The result was, that most of those who made this attempt ultimately decided for the one or the other; and in this way Schleiermacher led more to become adherents of Hegelianism than he knew or wished, just as he had done in reference to orthodoxy. matter took a different shape in the case of those who were already firmly persuaded of the truth of the Hegelian standpoint, or of some standpoint akin to this, before they had made a more thorough acquaintance with the views of Schlei-This was the case with R. ROTHE, who was introduced to theology and the Hegelian philosophy by Daub, and who had already in the work characterized above (§ 339, 2) expressed his indebtedness to Schleiermacher. principal work gives evidence, not of a syncretic but of an organic blending of ideas, the seeds of which had been planted by both men and had ripened under the influences of an atmosphere which contained many theosophic elements. Its chief importance lies, it is true, in the domain of theology, in which Rothe long occupied a first place as a writer on dogmatics and ethics, but it cannot be passed over here. is entitled Theological Ethics (3 vols. Wittenberg, 1845-1848. The first volume reached a second edition in 1867, and the second in 1869). The division into the doctrine of property, the doctrine of virtue, and the doctrine of duties, connects it with Schleiermacher's Ethics; and so too the contrast which we find in the two first divisions between the abstract ideal, apart from sin and redemption, and concrete reality, recalls the main divisions in Schleiermacher's Doctrine From a philosophical point of view, the introduction is the most interesting part. In order to assign to ethics its place within speculative theology, he gives an outline of the latter, and in this outline we have the expression both of the bliss of faith as it has been felt in experience, and of a candour which shows that the writer is entirely untrammelled by the mere letter of Scripture. After having discussed the general conception of theological ethics, namely, its basis, method, and introduction, he passes on to the Doctrine of Property, and this occupies the first volume and two-thirds of the second. The second part, the Doctrine of Virtue, is treated most briefly of all. In this part he discusses the peculiar nature of the individual by which he is enabled to realize the highest good. The Doctrine of Duties, on the other hand, is very fully discussed, and takes up the whole of the third volume. It will be understood, he says, that the moral problem cannot be considered apart from the question of restraint: for the righteous there is no law. Duties to self and special duties make up the system of duties, just as the qualities of genius, wisdom, originality, and strength had constituted the chief virtues, and as the moral communities had been constituted by property. All these communities issue in the perfect kingdom of God, which transcends the contrast implied in State and Church.

3. Some years before Rothe published this book, JOHANN ULRICH WIRTH, parish clergyman in Winnenden, whose first work was referred to above (§ 334, 10) as belonging entirely to the Hegelian school, brought out his second work, The System of Speculative Ethics (2 vols. Heilbronn, 1841, 42), of which the same cannot be said, since the Schleiermacher element in it at least balances the Hegelian. Already in the introduction, in which the encyclopædic position of Ethics is referred to, he attacks Hegel on the ground that Ethics is made a part of the doctrine of objective spirit, and that accordingly art and religion, which equally give moral impulses, are not discussed in connection with it. In the Pure Ethics, which are treated of in the first book (and volume), he first discusses in ethical metaphysics the Good, in ethical anthropology, the Will, Freedom, and Conscience; and finally, in ethical cosmology he takes up Duty, Virtue, and the Highest Good. He then passes on to Concrete Ethics (2nd vol.); and in this he first works out the system of individual morality in its identical, different, and concrete forms, and in connection with the last-mentioned refers to Character, Friendship, and the Family. He then goes on to the system of objective morality, or to the philosophy of law, and this is treated very fully. Finally, a transition is made to the system of absolute morality, in which religious and intellectual morality and the morality of the beautiful are discussed. The fact that the last-mentioned is given the highest place, and that it finally includes the discussion of Society and Amusement, has led many who are accustomed to read but the beginning and the end of a book to repeat of one really thoroughly worked out, the statement, that it declares private theatricals to be the highest fruit of morality. As if Schleiermacher had not given an equally high place to pleasant social. intercourse, and Rothe, in his first work, to popular festivals! To this should be added the fact that Wirth promises a history of philosophy by way of conclusion to his ethics, though it has not yet appeared. Wirth departs still further from Hegel, in his work, The Speculative Idea of God (Stuttg., 1845). Hegel is here expressly designated as the one who closed the period of the philosophy of the Notion—a period which has passed away and is about to be succeeded by that of a philosophy full This new philosophy is to be a thoroughly philosophical religion—a religion which began as feeling and became knowledge. If this last proposition accords very well with the fact of a fusion of the doctrines of Schleiermacher and Hegel, it is apparent from the whole work that since the publication of his last book, Wirth had admitted a third doctrine into his mind, namely, Schelling's doctrine in its altered form, as it was then expounded by Frauenstädt and Paulus. He expressly assigns to this new doctrine of Schelling's a position subsequent and superior to Hegel's absolute philosophy; and he besides distinguishes in it three different In his sketch of the history of philosophy, which takes up by far the largest part of the work, he describes Neo-Platonism as the culminating point of Greek philosophy; and so likewise he represents Schelling's new doctrine as the crowning point of German philosophy. Neither the one nor the other has however reached the real goal of philosophy. order to get to this, it is necessary to take as a starting-point the inner contradiction between his infinitude and his individuality which man finds in himself, in the religious needs of his nature, and from this, as from the principle which has to be laid down as a foundation, to rise to the principle in which the solution can alone be found, because it has and is this solution in itself. Thus God will be rightly conceived of only when the triplicity,—which is not demanded by philosophical necessity, - is abandoned, and when God is conceived of rather as a quadruplicity of substances; as essence, life, central soul, and central spirit. Of these, the fourth is undoubtedly the substance of substances; and we get a right conception of God when we recognise that He is not to be thought of apart from the eternal universe, and apart from an unknowing principle in Him, which is transfigured into knowledge and will. God is self-conscious only as He penetrates and sways the pure universe or the eternal cycle of the spheres. (Personality he regards as a clumsy expression.) From the separation which takes place in those principles or substances, and which is brought about by the will of God, there arises the contrast between the eternal and the temporal spheres. In the latter we have a manifestation of finite nature in existing, living, and animated creatures, above which the created spirit raises itself as the work of Spirit, as a relative Absolute, as an ego endowed with spontaneity, which has come into being by the primal spirit's act of distinction within itself, but which is at the same time a reflex of God. Every true doctrine of freedom must recognise both of these factors equally. God is the henadic subjectivity of all relative henads, not as a harmony which exercises compulsion, but as a harmony which supplies them with impulses. In man, who is the image of the divine quadruplicity, the primal spirit gathers together all other substances into a unity; and man again realizes in morality the ideal content which he makes his own in the successive stages of philosophy, religion, and art. Morality is therefore a manifestation of the Absolute Spirit, as was shown in the System of Ethics. Hegel, who was in error both as regards this and also as regards the correct sequence of those forms, cannot, on account of this, perceive that the life of spirit is a new creation, a re-creation of the universe out of the ideal. He accordingly knows nothing, either, of a wisdom which creates life, but only of a wisdom which is like the owl of twilight. The aim which God sets before Himself, namely, to be Spirit in a kingdom of spirits, the members of which live freely in the primal spirit, is attained

by the passing of the created spirit, in the course of its development, through the four stages of the existing, vital, psychical, and pure spirit. These four periods, or revelations of the four substances in God appear also simultaneously in races, temperaments, etc., because the individual too is on his We must contemplate God not only, as part a microcosm. hitherto, in the eternal universe, and further in the temporal universe, but also in His eternal-temporal universe. as He is the spiritual unity of these three worlds, is God the Absolute, or God absolutely, i.e., the infinite spiritual organism, which we not only call world, but world-all. The existence of the universe, as being at once temporal and eternal, is to be thought of, so far as the individual is concerned, as follows: In the telluric world, by the negation of his natural basis as his aim, man reaches what he originally in the eternal world eternally is, which becomes intelligible when we get a correct insight into the conception of cause and end. So far as the universe, looked at as a whole, is concerned, we have to think that when the spirit on one planet still occupies the stage of mere existence, it has on another meanwhile reached the vital stage, and so on. By means of this great law of the unity of the co-existence and succession of all things in the Absolute, the original aim of creation is attained, namely, that God should be the universal spirit in a system of relatively infinite The thorough understanding of this is not to be regarded as a quietist wisdom, such as all German philosophy has hitherto been, but as a union of modern thought with the ancient original wisdom; and it brings the worship of God into harmony with the worship of industry, humanity, science, and the Beautiful. This is the purely ideal-realism; for the eternal world is what is simply ideal, the temporal world is what is simply real, while the world as temporal and eternal is In the year 1851, Wirth started a journal under the title Philosophical Studies. He soon, however, gave this up in order to work on the journal conducted by Fichte and Ulrici, to which he had always been an industrious contributor, and of which he afterwards became joint editor. his essays in the latter, those on Immortality (1847) deserve special mention, while of the essays in the Studies, we may call attention to that on Reform in Philosophy in reference to Dialectic, in which he states that the doctrine of knowledge in itself and its method, or the theory of scientific knowledge, i.e., dialectic, is the subject with which philosophy above all other sciences has to do. He moreover shows how what is to be done before all else is to add to inductive knowledge, or knowledge which constructs conceptions, and to deductive knowledge, or knowledge which is based on deduction from ideas, a productive knowledge or knowledge which realizes ideals. Neither empiricism, which does not get beyond the first kind of knowledge, nor Hegelianism, which does not get beyond the second, fulfils this requirement. What we have therefore got to do, is to unite the realism of the empiricists with the idealism of Hegel. Not only does Wirth himself consider that in his theory this problem has been solved, but H. Schwarz, among others, is of the same opinion.

4. While Rothe and Wirth confined their attempts to blend the ideas of Schleiermacher and Hegel more to the departments of speculative theology and ethics, Leopold George (born at Berlin in 1811; for a long time Privatdocent there; died on the 24th of May, 1873, when Professor of Philosophy in Greifswald) tried to accomplish this in the fundamental principles of philosophy. He was an enthusiastic pupil of both great masters; but as a brilliant lecturer, and in his power of presenting his ideas in a scientifically arranged form, he approximated more to Schleiermacher, for whom he had personally a very great respect. He first made himself known by a work on Old Testament festivals, and by his extremely brilliant and able essay On Myth and Legend (Berlin, 1837), and gathered round him a circle of devoted hearers. He next published The Principles and Method of Philosophy with special reference to Hegel and Schleiermacher (Berlin, 1842), with which his System of Metaphysics (Berlin, 1844) is closely connected, for in the first of these works, after having fully discussed the principles and method of philosophy, he presents a short synopsis of the system of philosophy, and this is further developed in the System of Metaphysics. After writing these works, which for a long time did not meet with the recognition they deserved, George appeared as an author in the department of psychology. In The Five Senses, etc. (Berlin, 1846), he seeks to make the theory of sense-impressions the basis of psychology, and at the same time to simplify it by reducing all impressions on the organs of sense to slower and more rapid movements. In this way he thinks that the so-called metastasis of sense-impressions, among other things, can be

explained, since the fifth sense, which is affected by the slowest and most rapid movements, as for instance, by impact and heat, and therefore comprises them all, acts instead of the rest. Delightful as this little work is, like everything which comes from George's pen, it cannot compete either in originality or importance with the two works the contents of which are treated together in the following sketch. The equally great importance of both masters, and at the same time the diametrical contrast between their theories, which he is never tired of presenting to us in what are always new and highly striking antitheses, lead him to seek after the common ground which could have formed the basis of such a contrast. George finds it in the fact that both have made an abstraction, namely Whatever be the other contrasts being, into a principle. between their views, since for the one, being is the most universal subject, and for the other the most universal predicate, and so forth, they both very easily incur the attacks of scepticism, which philosophy is able to escape only when it really drops all presuppositions and starts with what scepticism itself never doubts, namely, nothing. A philosophy which starts from nothing, is a real thinking-after a God who creates out of nothing, a thinking-after which is quite as free and creative as the act which it reproduces. The further advance from nothing takes place by means of the speculative method. Respecting this, George says that Hegel and Schleiermacher surmounted the opposition implied in the analytic and synthetic, inductive and deductive processes, and that they follow what is called, according to Schleiermacher's terminology, the process of combination, but that their methods themselves constituted the contrast which Schleiermacher declared to exist within the combining process, and which he defined as that of the heuristic and architectonic processes. It is this last-mentioned idea which exclusively constitutes Schleiermacher's claim to be received as an authority, while Hegel is to be regarded as a master in philosophy, because he sought out the complementary conceptions which were want-The arbitrariness which may be brought as an objection both against the way in which Hegel passes to the "opposite" and against Schleiermacher's fourfold division, and which is concealed in the case of both only when the one is thinking architectonically as well as heuristically, and when the other is thinking heuristically as well as architectonically, disappears,

when it is united with Consciousness, which was the leading point of view of both their methods. If we maintain with Hegel, that opposites demand mediation, while holding at the same time that the opposition does not simply appear to exist, then we must end by separating the two opposites thus set against each other, by means of their indifference, which on its part again cannot be thought of without an opposite. That is to say, we will apply Schleiermacher's plan of mutually intersecting lines, and, instead of one pair of opposites, have in all cases two, in which each term, though in a different way, is put in opposition to three others. Suppose we think of two such oppositions as a and b, c and d, so arranged in reference to each other that each term constitutes the fourth part of a larger square; and if we then add to a and b, which are thus placed in opposition, the square t, which is the mediation they demand, and to c and d again add u; and if we further reflect that a and c, of which the one stands beneath the other, also demand a mediation (v), and that in the same way b and d, of which the one stands beneath the other, also require a mediation (w), and that finally t and u as well as v and w, point to a mediation which is valid for both (z), namely, the principal square which is still wanting, we arrive at a plan which does not take the form of triads, but of enneads. this advantage over those of Hegel and Schleiermacher, that in this way we arrive at a really final mediation which is wanting in both of the other two. For this reason we can say of them that they have a method but no system, for we attain a system only when method has a beginning and a definite end. It is not a mere accident that, connected with this defect, there is the fact that both philosophers have no place in their system for the true Absolute, or God. Hegel makes Him disappear in one-sided immanence in the world, while Schleiermacher places Him in one-sided transcendence beyond knowledge, which thus becomes with him, just as with Hegel, a mere wisdom of this world. We thus get first a small system of categories, since the two opposites Nothing and Being unite in Becoming, appearance and disappearance in Existence, the two first members of the two opposites in Beginning, the two second in Subsistence, and finally, the four mediations, and therefore all those determinations of thought, unite in Eternity, which is the first predicate of God, while the world has applied to it the categories of Beginning and Subsistence, Becoming

and Existence, but not that of Eternity. If we call the whole ennead, Being, since in defect of another expression we take one and the same expression in a double sense, then by means of the same creative thought which had conducted us from Nothing to Being in the narrower sense, we arrive at the opposite of Being in the wider sense. This is Quantity, within which the two opposites of multiplicity and unity, whole and part, give the (horizontal) mediations of Number and Amount. and the (vertical) combinations of Degree and Measure. Totality constitutes the concluding member; and the world is not totality, because in it degree and measure, number and amount are separated. The mediation of being and quantity gives Quality, and with this we have given the three enneads, manifoldness, simplicity, and transition; and among these, something, being otherwise, and determinateness. Finally, difference, identity, and mediation supply us, in the last determination of thought, with the means whereby we can escape pantheism and deism, since we think of the identity and difference of God and the world, of the transition from it to Him. and vet of the determinateness of both, and conceive of God as a ruler who determines Himself, etc. The system of quality is moreover of special importance in reference to method. Methods which adopt the category of difference only, or that of transition only, are necessarily one-sided. The opposition of being and quantity demanded, in addition to the mediation in quality, according to the methodological plan, a second opposition (between c and d), which intersected the former. This gives us the two systems of Essence and Appearance, of qualitative being and qualitative quantity, which naturally take the form of enneads analogous to those three: position, negation and relation, attraction, repulsion and indifference, inherence, accident, and substance made up the first; the external, the internal and manifestation, content, form and existence, thing, quality and reality, constitute the second. is in accordance with the rhythm of the method, that they should themselves again be mediated in a new ennead, namely, the system of *Reality*, which is separated into possibility, necessity and reciprocity, causality, contingency and actuality, ground, condition and independence. In the same way, the systems of being and essence unite to form that of Subjectivity, in which we have spontaneity, receptivity and activity, action, passivity and state, force, resistance and power

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On the other hand the systems of quantity and appearance unite to form that of Objectivity, in which we have actual existence, connection and relativity, universal, particular, and individual, infinite, finite, and absolute. Spirit forms the final member, which in the same way constitutes an enneadic system, only that in this case we come upon enneads in nines. This is easily understood, since here all that has been so far developed, is united together. In accordance with this, all the first members, the members, a, according to the ground plan, nothing, multiplicity, manifoldness, etc., are united together in the superadded ideals; all the second members, b, i.e., being, unity, simplicity, etc., are united together in the reals which are attached to them; all the third members, t, becoming, number, transition, etc., are united together in the Notion; all the fourth, c, origin, whole, something, etc., in abstraction; all the fifth, d, passing-away, part, being otherwise, etc., in concretion; all the sixth, u, existence, amount, determinateness, etc., in the Idea; all the seventh, v, beginning, degree, difference, etc., in transcendence; all the eighth, w, subsistence, measure, identity, etc., in immanence; lastly, all the ninth, or final categories, z, eternity, totality, mediation, etc., are united together in the Divine Spirit; and when we have reached this, we have got the highest metaphysical expression for God. Notion and Idea, immanence and transcendence, do not here any longer constitute opposites. Since Spirit is the sum and substance of all these categories, everything which proceeds from spirit is subject to them. Accordingly, therefore, thought is; and psychology in the part in which it treats of thought, will have to show why thought is bound down by these definite rules. Kant was thus able to deduce certain categories from reflection and apply them to judgments, those, namely, of being, quantity, and reality, to which thought in the act of judgment is united. Hegel adopted a higher standpoint, but his deficient method made it impossible for him rightly to conceive particularly of the final categories. Ten years after the appearance of his Metaphysics, George published his Manual of Psychology (Berlin, 1854). It was dedicated to the memory of Schleiermacher, whose lectures on psychology George edited eight years afterwards from a notebook of his own. In the introduction (pp. 1-35), he discusses the conceptions of organic, living, and animated existence; and the result he arrives at is, that we can speak of life, and

therefore of soul, only in the case of the animal which in a certain measure unites in itself the vegetable and crystalline forms, and by means of its nervous system brings them to that central inwardness which we call self, and which, by means of reciprocal action between it and the external world, becomes what we call soul. But since this reciprocal action is rendered possible in the first instance by the intervention of the sense nerve-fibres, the First Part (pp. 36-221), takes up the sensuous soul, i.e., the soul in so far as it is conditioned by sense perceptions. As was done in the work on the senses, so here too, the vibratory movement which is conveyed to the sensory nerves is taken as the element common to all sense impressions; the fifth sense, touch, is separated from the rest, while it is shown that these four, by means of the mutually intersecting opposites, far and near, permanence and change, form a system. Since sense-perception gives consciousness, not only of the stimulus given by the external world, but also of the reaction of the sensible subject, we must distinguish in it two functions; perception of the changes in the external world, i.e., perception in the narrower sense, and perception of its own reaction, i.e., the fact of being affected, or pleasure and pain. In both, in accordance again with the mutually intersecting opposites, we have to distinguish four moments, in the case of the former, wakefulness, attention, appropriation, sensation; in the case of the latter, joy, hope, excitation, satisfaction, and their opposites. These moments are made to form a parallel with the four senses, and it is shown how they are prevalent in morbid phenomena. Thus we find attention in somnambulism, sensation in dreams, and so on. same arrangement into four is repeated in temperaments, and further, as expressing the moments of individuality, instinct and genius. These parallels frequently remind us of Steffens; and in those passages in which animals are referred to, they remind us of Oken. We are reminded of the latter also by the fact that George by no means makes such a distinction between man and the other animals, as is generally done. Since in treating of sense-impressions, and since,—in particular in those passages in which it is shown that a very great deal which is considered to be due to a bodily process is due to a psychical one, -it was not possible to avoid making reference to conscious processes, George repeatedly impresses upon us the fact that these are anticipations. By means of sense-perceptions alone the subject is by no means able to distinguish the external world from itself, for the sensory nerves conduct to it only a successive series of sensations, which, because they have not yet been arranged in space, remain in a state of This constitutes the distinction between the sensuous and the conscious soul, which is treated of in the Second Part (pp. 222-399). The fact that the spot where a sensory nerve is excited makes no difference so far as sensation is concerned, proves that the organ of sensation does not suffice for the localization of the sensation. But then, it is also impossible to deduce consciousness from perceptions, for consciousness presupposes that we place ourselves here and the objects yonder, that, in fact, we distinguish ourselves from them. It. is just sensation which brings them near, i.e., makes the distinction disappear. The motor nerve fibres constitute the organ which makes this distinction, and they accordingly are for all forms of consciousness, and therefore for thought, exactly what the sensory nerve fibres are for perception. That the development of the separate moments of consciousness should give us nine such moments, will be understood from what was said above in reference to method. The immediate certainty that our will produces movements allows us to put a boundary line between that something in which the movement proceeds without meeting any resistance, and that something in which it meets with resistance. It is in this way that we first determine the existence of self-consciousness and objective consciousness. By means of the union of the two, that is by Reflection, it comes about that much which self-consciousness considered at first as belonging to itself, is referred to the external world. Thus the resistance which our limbs offer to our will brings us by degrees to distinguish our body from our self as something external. The ego which has reflected, is thus something quite different from that of the little child. With the opposition of subjective and objective consciousness which is reconciled in reflection, is connected that of the combining Understanding, and of the distinguishing Imagination which gives fixity to the individual thing, both of which are united in *Memory*. By means of the last the moment of time is introduced into the system of localized points, which is what has been reached so far; and since the continuity of consciousness arrests the flow of perceptions, memory does not reproduce traces of sensations as is gene-VOL. III.

rally thought, but combinations, the occasion for which has been supplied by the sensations. The reciprocal action of reflection and memory gives occasion for the rise of two new forms of consciousness. Reflections retained by memory become Presentations, while the memory supplies matter for new reflections, and in this way produces Perceptions. former, self-consciousness and understanding co-operate, and in the latter, objective consciousness and imagination. All the moments of consciousness hitherto treated of, are so closely connected together and make up by their reciprocal relations such a complete unity, that it is essential to conceive of them too in This notion is *Thought*, by which is to be a definite notion. understood consciousness as a result, or as completed consciousness, which just on this account—seeing that the first beginnings of consciousness spring from what are as yet unconscious movements—is master of the movements of its own body, and through them of all the rest. with the points here brought forward, there are often given, by way of excursions, very interesting and more extended explanations, among which the following may be specially mentioned. In connection with objective consciousness we have a thorough examination of the union of sensation with movement, by means of which sensation becomes touch. car, too, touches when it listens.) In connection with presentation, after-images and complementary colours are explained, not physiologically, but psychologically; and also language is taken up and discussed. Art is considered in connection with perception, and the difference between man, the animals, and idiots, who are also thinking beings, is taken up in connection with thought. Diseased consciousness is treated of in an appendix. The Third Part (pp. 400-588) treats of Reason, or the knowing soul, which, as such, has perception and thought as its equally essential preliminary conditions. In this part the enneadic rhythm comes more prominently forward than it did in the second, since each of the nine sections is put in the form of nine parts. Had George himself—as will be done here—placed his Logic before the public simultaneously with the three first sections of this Part, his latest work, Logic as the Theory of Knowledge (Berlin, 1868), would not have had to face many of the objections which have now been made to it. Even one who had read George's Psychology when it first appeared might,-

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when, fourteen years later, he found in the introduction to the Logic the statement made as self-evident, that conscious thought has the motor nerves for its organ, -no longer remember what reason George assigned for this, nor, that the objection, that then animals too must think, does not alarm him. Besides, George, in the same introduction, gave such as read introductions only,-and these are confessedly numerous,occasion for supposing that he had modified his earlier standpoint, which he is very far from doing. When, for instance. he states that the tendency in thought which was begun by Fichte came to an end with Hegel, and, on the other hand. says of the different course of thought, that "Schleiermacher pointed it out, and Trendelenburg followed it up," we certainly cannot but suppose that he no longer wishes, as formerly, to reconcile Hegel and Schleiermacher, but Hegel and Schleiermacher as followed up by Trendelenburg. This, George is far enough from doing. He denies that space and time, or the categories, can be deduced from movement; he denies that movement in being is the same thing as that in thought to which Trendelenburg gives this name; he denies, in short, the very principles upon which Trendelenburg's theories are based (cf. § 347, 7). What reason is there then for the admission above referred to, which only helps to conceal the meaning of what George himself asserts, namely, that he stands exactly where he stood twenty-six years ago? That there is no difference particularly between the standpoint of the Psychology and that of the Logic, will at once be seen if we compare the table of contents in both books. Not only do the three principal headings in the Logic, I. Faith (pp. 48-219), II. Cognition (pp. 220-481), III. Knowledge (pp. 482-662), cover the subjects taken up in the three first sections of the doctrine of reason, but in each of these the nine headings are exactly the same; for the fact that in the Logic we have Experiment in the place occupied in the *Psychology* by Trial, can scarcely be called an alteration. Thought becomes knowledge only by union with sense perception. The succession of sensations which was furnished by perception, is by means of thought changed into the correlation of objects; and to these, as forming their basis, are attached the sensations of blue, sweet, etc., as qualities. Every theory of knowledge, therefore, is onesided, which reduces it simply to perception, or simply to thought. The first step of knowledge is (1.) Faith, the surrender to what is perceived, joined to the certainty that thought corresponds to the object. Beginning with Opinion, by which we take the single object for itself, it goes on, in Confidence in this, to maintain the unity and sameness of the object in all its changes, and unites both in the Certainty, which has for its subject the development of the object, and therefore something which is a universal, and the reality of which is denied only by Atomism. While in these three moments faith is directed only to what is actual, it develops by means of Conjecture, which has to do with ground or reason, and by means of *Probability*, which has to do with the conditioning circumstances, into Conviction, which is possessed by the law of phenomena. In spite of the satisfaction which conviction secures, there is connected with it, by means of mutual play of certainty and conviction, a desire to get to the connection of laws. The Presentiment of the existence of this connection, supplemented by critical *Doubt*, leads to *Truth*. Were opinion and conjecture repeated in the first of these, and confidence and probability in the second in a higher potency, then in truth all the moments of faith would be united, and truth and faith mutually bound to each other; for truth is the certainty and conviction of the correspondence of our thought with being. For this reason, the highest object of faith, namely God, is the highest unity of being and thought. and is therefore the highest truth. As truth is a matter of faith, so clearness is a matter of knowledge. Before the Logic passes on to this, the different forms of untruth, error, delusion, superstition, unbelief, are treated of, just as was done in the The doctrine of (II.) Cognition emphasizes first the opposition between it and faith,—since here thought is the primary thing and perception is secondary,—and then passes on to the idea of the Subject, and further to that of Predicate. The starting-point for the formation of both is constituted by the fact that the ego knows itself to be the subject of changes. In addition to this, the Law of Identity gives the standard for the construction of the subject, while the Law of Contradiction gives the standard for the attribution of predicates. Both are thus criteria of clearness though not of truth. At the same time, we must not regard clearness as form that is indifferent to the matter contained in it—the way that formal logic regards it. Just on this account, those two principles preside over the formation of *Judgment*, which in its

complete form recognises the predicates as the reciprocal determinations of the subject, and is thus at once analytic and synthetic. According as the process of the formation of the judgment seeks out for the subjects the predicates which correspond to them, or the reverse, is it Induction or Deduction. As regards the former, George very strongly opposes the view that the inductive process is applicable only in the empirical sphere, that it consists of abstraction, and leads to unreal abstractions. In mathematics, we pass by means of induction from the square, rectangle, etc., to the parallelogram in general, which really exists in the rhomboid, as it is always the case that the primitive germ shows the universal in the form of reality. The process of deduction is in accordance with the plan of division, which, if it is to be scientific, must be based on the positive opposition of correlative members, and supplies a systematic arrangement which unites together those given by Hegel and Schleiermacher. After the ordinary division of judgments has been criticised from the point reached, and after the princ. exclus. tertii has been referred to the deductive process, just as previously the princip. rat. suff. had been referred to the inductive process, George goes on to discuss the Notion. The Notion, or Definition, is the product of the inductive and deductive processes, and thus underlies also the laws of thought just mentioned, only that since in it. as the product of judgment, subject and predicate become one, the two previously mentioned processes get their due The transition from judgment to notion brings us to Principle, and by going from notion to judgment we come to Method. In the former, the essential thing is the reciprocity of the known presentation in the subject, and of the induction which makes the comparison, in the latter it is the deduction of the proper predicates. In a criticism of the various methods, in which Trendelenburg's merit is found to consist in his syllogistic, Schleiermacher's in his heuristic and architectonic, and Hegel's in his dialectic method,—he compares with them all his own speculative method, which consists of nine members. The result of method, and therefore of the whole of knowledge, is System. Since in this, each conception has its place, the maximum of clearness is reached; and it thus becomes possible to arrive at an agreement with every one. Faith and cognition, truth and clearness, are the equally necessary factors of (III.) Knowledge. They are co-ordinate, because both

unite in themselves the elements of perception and thought. Discovery or Invention, and Observation, in which the first moments of faith and cognition are reconciled, give by being ioined together, Experience (Certainty, Judgment.) Hypothesis and Analogy are the factors which unite to form Experiment (Conviction, Notion), which is by no means to be limited to the domain of the natural sciences, but which plays a very important rôle in mathematics, the science of education, teaching, philosophy, etc. Experience and experiment are, in all the sciences, the pillars upon which their progress rests. It is realized by means of *Theory*, which anticipates principles, and by means of critical methodical Practice, and finally leads to Philosophic, or speculative Knowledge. This kind of knowledge, and hence philosophy, does not stand in contrast to other kinds of knowledge (and sciences), but, since it rests on the latter, it stands above them. Speculative knowledge adopts what in all these has already been reduced to principles and has become knowledge. George's Logic concludes with an encyclopædic survey of the various sciences, and of their relation to the parts of philosophical system. We here leave the Logic in order to refer to what is discussed in the Manual of Psychology after faith, cognition, and knowledge have been treated of. As the rhythm of the method requires, the principal forms of the practical spirit are treated of in six sections. They are also discussed in accordance with the arrangement into nines, only that in this case the separate moments are not taken up in detail, but are merely enumerated. Inclination, he distinguishes between interest, abandonment, liking, respect, esteem, warmth of feeling, deference, fondness, love. In the case of (v.) Desire, he distinguishes between the feeling of need, seeking, longing, striving, exertion, wish, craving, aspiration, appetite. Under (vi.) Will, he discusses choice, reflection, zeal, discretion, assiduity, earnestness, resolve, plan, determination, and at the same time he examines the forms taken by will when it is perverted, such as mania, passion, etc. (VII.) Personality is the heading under which he puts frankness, sympathy, feeling, trustworthiness, firmness, heart, courage, fidelity, character. (VIII.) Action comprises assimilation, formation, instruction, production, organization, practice, enjoyment, authority, happiness. The fact that he discusses (IX.), the Divine Reason, in a work which is meant to have the soul for its subject, seems even to George himself to

stand in need of an apology. He finds an excuse for so doing in the fact that God is immanent also in the world; and he shows how all the predicates which were attached to the soul belong to God in an eminent degree. After discussing the subject of communion with God, he concludes with the remark, "that personality can count on having a true continued existence, only in so far as it is reconciled to the eternal God."

5. Schleiermacher, however, was not the only antagonist of Hegel's who began to be regarded as a philosopher of equal rank with him. Heinrich Moritz Chalybaus must be mentioned as one of the first to make this claim for Herbart. Born on July 3rd, 1796, he had, when a teacher at the School of the Cross, in Dresden, brought himself into notice by his Historical Development of Speculative Philosophy from Kant to Hegel (Dresden, 1837), which has been frequently reprinted since. In 1839 he was called to a professorship in Kiel, where he remained, with a short interval, till his death, on Sept. 2nd, 1862. Of his other works composed in Kiel, the following may be mentioned: Phenomenological Papers (Kiel, 1841), Modern Sophistry (Kiel, 1843), Outlines of a System of the Theory of Knowledge (Kiel, 1846), System of Speculative Ethics (2 vols., Leipsic, 1850), Philosophy and Christianity (Kiel, 1853), Fundamental Philosophy (Kiel, 1861). Chalybaus in his first work had contrasted with the idealistic one-sidedness represented by Kant, Fichte, Schelling, and Hegel, the realism of Herbart as a one-sidedness which was the complement of the other, some saw in this the announcement of a system which was to reconcile these two one-sided theories. It is true that in the preface to the second edition he defends himself against being so understood; but when, in connection with this, he gives us to understand that it would have been more correct if he had been classed with Hillebrandt, instead of with Krause and Suabedissen, he practically grants the truth of the statements as to his syncretism. In the works which followed, he constantly gives occasion for these same statements. Thus, in the Phenomenological Papers and in the Theory of Knowledge he conceives of the contrast between Hegel and Herbart as consisting in the fact that the former represents in a one-sided way the ancient form of objectivity, and that the latter represents modern subjectivity in a similarly one-sided way; or, that with the former being is lost in becoming, while with the latter becoming is lost in being.

saying this, he asserts what is connected with it, namely, that the one represents negative dialectic only, and the other formal logic only. He likewise specifies pantheism and atomism as the systems which represent the one-sided views held by both men; and at the same time he is constantly directing attention to the fact that, if the errors of atomism are avoided, monadism must necessarily meet with due recognition. on this account, that, in developing his arguments, he much more frequently combats the views of Hegel than those of Herbart. This appears especially in the discussions on the principles, method, and system of philosophy, in which Chalybaus, exactly as George had done simultaneously, finds fault with Hegel for not uniting principle and method so as to form a completed system. But further, since the essential principle of philosophy consists in this, that, as its name signifies, it is a striving after truth, and not simply after theoretical knowledge, Hegel is to be blamed for having deprived philosophy of its teleological or ethical colouring which points towards the ideal. With this error of Hegel's is connected also that "Epimethie" of philosophy, which has no intention of vivifying, but which seeks to comprehend, and to paint grey in grey. Herbart again deserves to be criticized, because he made a complete separation between practical and theoretical philosophy, a method of procedure which in the end leads both to blind action and unpractical knowledge. On the contrary, the time has come when philosophy should take Prometheus as its pattern; and this it does when ethical personality becomes the central point round which turns the effort to reach wisdom. But in order that this may be accomplished, it is necessary that the theory of knowledge,—that is, the fundamental science upon which all the sciences rest, seeing they adopt from it the lemmata that form their basis,—should develop not only logical and physical, but also ethical categories. must be acknowledged that Chalybäus has given such a table of categories in his system of the theory of knowledge and that he has shown, in his system of ethics, how in accordance with this table a point of union has to be found between ethics and the fundamental science. In this way he enables the reader to form a general idea of those parts of his system which he has not fully worked out. Analogy supplies the data for thus constructing it. Of the three parts in which Chalybaus has treated the theory of knowledge, the first is entitled,

The Doctrine of Principles. Here already he indicates the view,—which is expressly stated both in the further course of the work and in other works, as for instance in the Ethics, in an essay in Fichte's Zeitschrift on the subjective and objective beginning of philosophy, and elsewhere,—that the formal and material principles of philosophy mutually condition each other. Since our thinking is a thinking-after the divine thought, a philosophy which is recognised to be a striving after truth must bring us to a God who wills, i.e. loves, the truth, and is therefore a self-conscious subject. Since philosophy starts with the intention of bringing out the truth by means of knowledge which is accompanied by thought, it is speculative and not merely theoretical science. Just for this reason, it stands in need of a mediating process, which conducts us to the end which has to be reached. Accordingly, the Doctrine of Mediation is added to the doctrine of principles as a second part, while Teleology follows as a third part. The most important discussion in the first part is that on method, in which Chalybaus opposes the systematic consciousness to the two extremes represented by Herbart's firm attachment to formal logic and Hegel's contempt for it, which leads to an endless process. This systematic consciousness includes formal logic as it does all inferior standpoints, and thus enables us to return upon them. The second and fullest part contains in its three sections, ontology, logic, and theory of knowledge, the fundamental categories of speculative physics, logic, and psychology. Besides this, the rhythm of the whole system is repeated within them. The principles of ontology, etc., are first laid down: they are here called "principles" just because they have been arrived at by deduction. The mediation of these is next discussed; then, finally, he takes up their perfected form and their highest end. The most important point in the ontology is, that existence is defined as eternal æthereal matter—an assumption which can lead to materialism only when it excludes every other assumption. This materia prima or pura, which cannot yet be called substance because there is nothing which it substat, does not only manifest itself in the phenomena of the unity of the world, as in gravitation, but is also the presupposition of the notion of spirit, and even of God. It may be called the soul-æther; it is the spatially and temporally infinite, since space, time, and number are its forms, which we think by abstraction from it. It is now to be shown how in

this concrete infinite there exists the possibility or conditio sine quâ non of all substantiality, causality, and reciprocity, as well as of corporeality, of life, and of soul, all of which thus belong to the ontological categories. As Being or Matter was the element of ontology, so Thought is the element of logic; and it is bound by the law of identity, since it is impossible to think anything and at the same time not to think it. Thought takes an active form in the construction of conceptions, judgments, and syllogisms. Chalybaus here lays down the three following canons as being of the highest importance in the application of the categories: namely, that the lower can exist without the higher, that the higher cannot exist without the lower, and finally, that the higher never proceeds from the lower, although it may show itself by means of the lower; so that everything is present at once in the highest in an immanent way. In the theory of cognition, which treats of the relation of being and thought, Chalybaus finds cause for blame in the fact that the modal categories, which are to be conceived of first here, have had given them what is partly an objective ontological form, and partly a subjective logical form. It has not been considered that knowledge is not only something distinct from being, but something distinct from thought. The principle of knowledge is consciousness, and its categories are modal; but to these freedom in its various forms also belongs, and their highest function consists in verification and in the exercise of critical judgment. The third part of the theory of knowledge, teleology, is the foundation at once of æsthetics, ethics, and the philosophy of religion. The Absolute forms the subject-matter of this part. Philosophy, which was something that willed truth, can posit as the Absolute only something which wills absolute truth, and therefore a self-conscious This willing of truth is love, in the positive sense, which does not only, like "negative love," wish to be recognised, but wishes to recognise in turn. When philosophy has reached this conception it really goes beyond pantheism and atomism, since it admits that God knows all being as His own. But it goes still further than this. Since God knows the world, as contained in eternal matter in the form of a possibility, to be non-existent, this knowledge becomes for Him the basis of This does not mean that in creation He became conscious of Himself, or that He came to have consciousness only in the world. After creation, just as before it, He knows Himself as the only God, but no longer as a God who is alone. It is not His eternal knowledge of the ideal end which undergoes alteration, but His knowledge of how this end is reached. Religion on man's part corresponds to revelation on God's part. In the latter, we must separate creation, preservation, government, and providence from each other as being essentially different, for apart from this distinction the miraculous, among other things, cannot be rightly understood. In religion, the stages of original piety, as well as those of the different forms of theology up to the highest, namely, what is credible for thought, are to be distinguished from each other; while at the same time we must avoid the extremes of degrading self-abnegation and overweening Pelagianism. Revelation and religion meet in worship, while worship appears as the way by which we reach the highest aim, the absolute ideal. The realization of this consists in the fact that the primal absolute is united with the world. This primal absolute has never ceased to be the active perfection of power, which determines itself to exercise will by means of the ideal, though it certainly did cease, owing to the act of creation, to be monotheos, pantheos, i.e. a solitary God, since everything which the Absolute was in itself is revealed in the world. This may be thus expressed. The eternal original nature of God as a Trinity is always coming more and more to be a Trinity immanent in the world, since the Trinity realizes itself by working out the divine economy of the plan of Salvation. The course it takes is as follows: The Ideas of Beauty, of the Right and the Good, unite to form the idea of Holiness; and by the authority which this exercises, the Spirit of God lives in the Church as a Holy Spirit. It is the mission also of science to bring us under the influence of this spirit, and science has not by any means the smallest share in this work. In the Fundamental Philosophy, which Chalybäus published shortly before his death, he attempts to present the substance of the theory of knowledge in a briefer and more popular Owing to this, it has lost somewhat in scientific preci-The only real divergence which calls for mention is, that in the doctrine of mediation the arrangement is altered, and the logic is put before the ontology. The detailed System of Ethics is also divided, like the theory of knowledge, into the doctrine of the principles of morality, the phenomenology of morality, and the system of ethics. It belongs to the

nature of the case, that of the three books in which these three parts are treated of, the third should be the fullest. In the first book, other views are criticized, and in connection with the theory of knowledge the ethical Idea is marked off from the æsthetic and religious Ideas. Finally, the Notion of human personality as immediate (eudæmonistic), legal, and absolute, is reached by deduction, and in this way Chalybaus gets a basis for the organic division of his system. But before this is actually given, he discusses, in the second book, the actual process of the realization of morality as this has been modified by the historical entrance into the world of evil, which philosophy represents simply as a possibility. The Christian way of viewing the history of humanity and its relation to the philosophies of history which have been attempted, form the conclusion. In the third book, in accordance with what has just been pointed out, the first part contains the eudæmonology, and immediate and natural morality, as it realizes itself in the physical and domestic virtues. The second part comprises the doctrine of law, the law as respects persons, as well as the law of the civic community and the State. The third part is devoted to the doctrine of religious morality, the principles of which are first laid down, and followed by the consideration of Christian Wisdom in the life of the community, and of the organization of the Christian community. profound and searching discussions on questions of detail, and the constant references made in connection with these, above all to Schleiermacher, Hegel, Rothe, Wirth, and Jul. Müller, show that religious-ethical questions interested Chalybaus more than any others. Owing to the unshaken conviction that Herbart's real antagonist is to be found in Schopenhauer,—a conviction which led to their being treated of together in § 325 of these Outlines,—an attempt to refute and improve the theories of Hegel and Schopenhauer by surmounting their one-sided views can be regarded simply as the counterpart of what was attempted by Chalybäus, and must therefore be mentioned here. At the same time, it is not to be forgotten that it is only the opposition between their attempts which makes the one the counterpart of the other, and that by placing them together there is no intention of obliterating the contrast. CARL ROBERT EDUARD VON HARTMANN, who made this attempt, which was at any rate a noteworthy one, and thus fulfilled the prophecy made by the present writer as early as the year 1853 (vid.

Entw. d. deutsch. Spec. seit Kant, § 41, 3), was, according to the very delightful autobiography with which his Collected Studies and Essays (Berlin, 1876) are introduced, born in Berlin on February 13th, 1842. He was also educated there. at a time when the thoughts which had been put in motion by Hegel formed an important, perhaps the most important, element in the general intellectual ferment. Hegel's Encyclopedia and some French works of the eighteenth century were among the first philosophical works which he studied. Many regard it as a fact of decisive importance for his future career, that, after having completed his gymnasium course, the young officer attended the school of artillery and engineers from 1859 to 1862. For at this time, the admiration for Schopenhauer was already at its height among the scientifically cultured young military men in Berlin. He himself disputes this, declaring that there was no one, -among his companions, at least,—of whom it is true; and that he came upon Schopenhauer's works quite of himself, in the year 1863. Considerations of health led von Hartmann to quit the service in 1865, and he is now a Privatdocent in Berlin, having taken his Doctorate there in 1867. He sketched his theory of the universe in his Philosophy of the Unconscious (Berlin, 1869), which was already finished in the year 1867, and is therefore older than the earlier published controversial work, On the Dialectic Method (Berlin, 1868), and than the work which appeared later: Schelling's Positive Philosophy, etc. (Berlin, 1869). It is for von Hartmann an established truth, that pantheism,—better called monism,—is the only true theory of the universe; and he finds a confirmation of this in the fact that the two philosophical systems in which the development of thought up to this time had culminated,-namely, those of Hegel and Schopenhauer,—are at one as regards their pantheism. Their agreement extends no further than this, however, for otherwise, these two philosophers hold such opposite views, that they must be regarded as essentially antagonists who are bound to combat each other's theories. While, for instance, according to the one, it is the Idea only, i.e., the logical element, which has reality, according to the other, it is only the alogical Will, without ideas and reason, which is In this, above all, says Hartmann, we can see the great merit of Schelling's philosophy, not that he set up a system, for that was never his concern, but that he gave fixity

to a standpoint which is superior to the one-sided views represented by the two former. In his positive philosophy, +A is the pure possibility of being, i.e., as he himself says, Will; and in the same way -A is defined by him as pure object, i.e., as something which is in no way a subject, as something which cannot do anything, but is only presentation or Idea. Had he not allowed himself to be misled by his coquetting with ecclesiastical orthodoxy into proving that the germ of persons already existed in his principles, he would have spared himself the trouble of making that fantastic A°, and would have stopped short with ±A, as the unity of Will and Idea, or spirit. Still, it was he who, more than any other hitherto, first gave expression to the truth by the divining power of genius, as indeed usually happens in connection with the It is this truth which has now to be other sciences as well. established in a methodical way. In thus establishing it, we are not to think at all of a dialectical proof in Hegel's sense. His dialectic method is a tissue of errors, and its main blunder consists of the two false presuppositions of an Absolute, and of the reality of contradiction. (The unity of positive opposites is not contradiction.) The only scientific method of proof, on the contrary, is that which is followed in the natural sciences and in history. Starting from what is given in experience as that which is to be explained, we seek to get at the ground of explanation, which is to begin with the unknown. In this way, the philosophy of the Unconscious seeks to mediate between Hegel's pantheism of the Idea, or panlogism, and Schopenhauer's pantheism of the Will, and to transcend the one-sided optimism of the former and the pessimism of the latter. Although, in accordance with the task which he thus sets himself, von Hartmann arranges his discussions so that of the three parts into which these are divided, the two first contain only the methodically arranged facts which make the assumption of a universally active Unconscious necessary, while it is not till the third part that he passes on to the metaphysic of the Unconscious (c. pp. 320-678), still it is conducive to a correct apprehension of his system if we first bring forward some propositions from this last part, those, namely, which illustrate the connection between his system Philosophy will never triumph over mateand materialism. rialism until it resolves to take into account all the results of science, and to adopt for itself without limitation the legitimate starting-point of materialism expressed in the incontrovertible proposition, that every conscious act is conditioned by a normal brain function, and that therefore consciousness apart from a brain is impossible. To this proposition we may very reasonably add the assumption of unconscious mental activity, which precedes the brain function, as it does all other material processes which are its products. It must therefore be admitted that Schopenhauer made the first step towards refuting materialism by adopting it as a part of his system. His theory of the Unconscious Will in nature is however one-sided, for while he reserved the will for speculation he surrendered the intellect to materialism. This separation of the two is the weak point in his teaching, for where the Will, which does not possess the power of thought, is the only reality, there can be no rational connection in things, and no final end can be laid down as the culminating point of this In this point the Hegelian theory, according to which it is just thought, the Idea, or reason, which is the only reality, has an advantage over that of Schopenhauer. To be sure, it is not in a position to explain the alogical or irrational element in the world, an element to which Schelling rightly called attention, and which Hegel too foists in under the name of the Accidental. If we proceed methodically, i.e., if we proceed from what is given in experience, the phenomena both in the sphere of the corporeal (A. pp. 39-153) and in that of the spiritual (B. pp. 157-315) force us to admit that instinct, i.e. unconscious Will, and in the same way unconscious intelligence,—which can be best described by the word clairvoyance, - everywhere govern phenomena. The functions of the spinal cord and the ganglia, voluntary and reflex movements, the vis medicatrix natura and organic formation, sexual love, character, æsthetic judgments, the origin of speech, thought, perception, and mystical intuition—all show by their conformity to an end, that reason, and by their activity, that Will is revealing itself in them. Both of these must be unconscious, for cerebral vibrations which are the indispensable conditions of consciousness, are first produced In the same way they must be immaterial, for according to modern science, the only real element in so-called matter is composed of the countless attracting and repelling centres of force, that is, of Will. Finally, the concurrence of both in the production of phenomena compels us to think of

the Will, which has no power of thought, and of the Idea, which is devoid of force, not as two separate substances, but as attributes of one essence which may be called Absolute Spirit, if only we do not attach to this word the confused idea of a personal conscious Being, but which, on this account, would be better called the Unconscious. In respect of these principles of all existence, which, as such, may be called supraexistence, we can adopt a very great deal of what has been developed by Schelling in his theory of principles or potencies. And first, we can adopt the principle that the Will (the +A), apart from Idea, has nothing which it can will, but is entirely empty and without content, a point which has been overlooked by Schopenhauer, who perhaps borrowed from Schelling the thought that all being is will. Secondly, we can adopt the principle that the Idea, as such, is without the power of doing anything, that it only says what and how everything must be if it exists, while the actual fact of things existing is made possible only by the action of a Will. Hegel overlooked this, and he therefore torments himself in vain to find a way of passing from the logical to the real. Since Will and Idea unite, the former takes the latter up into itself, while the latter yields itself up to the former in order to become real; and thus they become the existences in which the logical manifests itself, being realized by means of the alogical. It is now that the rational first becomes real; and, since the logical in its final result is what is in conformity with an end, everything manifests an orderly arrangement which is in conformity with an end; and of this we can say that it is the best possible world. In virtue of this order, which is in conformity with an end, all reality manifests a rational sequence, an infinite wisdom, since the simplest elements, namely, the attracting and repelling centres of force which constitute the atoms of bodies and of æther, as being the first product of the Will when it has been filled up by the Idea, become the means whereby what is higher and more complicated comes to exist. It is owing to this conformity to an end that after the organic has once come out of the inorganic, Nature prefers the easier way of univocal production to the more tedious æquivocal production, and the latter therefore disappears. In the same way, she prefers to introduce improvements within the species by means of the "struggle for existence," and "natural selection." rather than to exert herself to reach a similar result by

a more difficult path. (The passing of one genus into a higher can take place at most in a lower and poorer stage of the earlier genus, but not in a stage which is richly differentiated, still less at its culminating point, as, for instance, in the case of the apes.) Since this sequence is in conformity with an end, is rational, in fact; and since reason or end exists only in the Idea, and not in the Will, the goal to which the gradual progress is always drawing nearer is of course the triumph of the logical over the alogical. Since consciousness is the condition of this triumph, the sequence in existing things is always seen to be a nearer approach to the point at which an organism has the conditions of consciousness within itself. These are given when a brain is so constructed that the impressions. made on it from without produce vibrations in it which are changed into sensations; and then the Will, as it were, strikes. against these movements which have not been produced by it but which are recurrent, and with a start awakes to consciousness. Consciousness may accordingly be called the emancipation of intellect, i.e. of Idea or reason, from the Will, and consists in self-manifestation, which, just because it has this character, is composed only of transitory manifestations. Whether there is any awakening to consciousness outside of this earth, we of course do not know. There is no very great likelihood, that among the infinitely numerous conceivable degrees of the cooling of the celestial bodies, our temperature, in which animal life is possible, should again occur. It is. enough for us, that on this earth the conditions necessary for consciousness are given; and conscious beings and their conscious pleasure or happiness are to be regarded as the final end of the world, and the end which has to be realized. Consciousness does not only represent the means whereby we strive to reach this goal, but it makes attainable something else which is different and far higher—it becomes the means whereby the world is redeemed. However certain it is that the world, owing to the wisdom or order in accordance with an end which shows itself in it, is the best possible world, it by no means follows that it is a good world, or that it would not be better if no world existed. On the contrary, we may most confidently maintain the truth of this latter view. The highest end, namely, the preponderance of pleasure over pain, has been decidedly missed. Only one who is still prejudiced by the emotional judgment of instinct can deny the fact, VOL. III.

which becomes more evident the more intelligence increases, that the little pleasure which there is in the world is far outweighed by the pain which every individual even, and much more the sum-total of all beings, has to bear. (Let any one just compare the pleasure of the animal which eats with the suffering of the animal which is eaten by it.) The illusion in which the men of antiquity lived, and which made them imagine that happiness is to be found in this life, passed away in the Roman Empire and in its passion of suicidal The other illusion, with which Christianity sought to comfort the world because of its misery, namely, that there is a conscious and therefore a bodily life beyond the present, is constantly disappearing more and more before the advance of modern Science. We are passing into a third stage, where we look for happiness in a present world which is at the same time a world beyond this, or in a world beyond this which is yet a present world, without having to fall back into the delusions which have been abandoned, or imagining that there ever can be any blessedness for the individual. idea of development, which first occurred to Leibnitz and was most energetically thought out by Hegel, is just what enables us so to blend the instinct of egoism with the instinct of sympathy, that, as a reward for the sacrifice of the individual will, we enjoy the hope that we are helping on the future happiness of the whole. (As compared with this resignation in the service of coming humanity, the suicidal Buddhism of Schopenhauer is a relapse to the pre-Christian standpoint.) Since this resignation sacrifices individual gratification and individual bliss, we cannot of course speak any longer of piety The time is not far distant when a man of culture will simply be no longer able to enter into the enjoyment of devotion. He will be quite as little able to enjoy the highest of all kinds of elevated pleasure—that, namely, which consists in scientific and artistic creation. There is no more need of genius, since the task of the time is not so much to give depth to work as to diffuse it. The process of levelling to a condition of solid mediocrity has accordingly already begun, in consequence of which art will be for humanity what at the present day the Berlin farce is for the Berlin business man in the evening. This stage too, however, is one of illusion; for the more knowledge and comfort increase for the whole human race, there are all the more who experience what the

man who has become wiser or richer everywhere experiences, that the enjoyment of comfort, etc., is not worth the cares and trials; and besides this, humanity cannot, like the individual, console itself with the thought that it is tormenting itself for the sake of an heir. Accordingly, after it has passed through these three stages of illusion, it will at last see the folly of its efforts, renounce all attempts to get positive happiness, and aspire to reach that state in which there is absolute absence of pain, i.e. after Nothing, Nirwana. A comfortless and hopeless doctrine! True, but comfort and hope are to be got only out of devotional booklets; philosophy does not supply us with them, but only with truth! But in this case, there is a kind of consolation in the truth. Even though it is after ever so long a time, just because this feeling of comfortlessness will have become universal, humanity, or if not humanity, some animal species which has raised itself above humanity, will take the step which Schopenhauer advised the individual to take, and deliver the world from the misery of willing, i.e. from the misery of existence. The point at which all, or even the majority, will unite in making this resolve, will not be reached, if the individual by an act of cowardly egoism at present plunges himself into the Nirwana of willing no more. On the contrary, it is still necessary that there should be an affirmation of life, an energetic willing and working in order that the goal may be reached at which the human race, when it is pressing and crowding together, will, in virtue of the means of communication of every sort, be in a position to come to that agreement which is to save the world. Von Hartmann (p. 643) sums up the results of his discussions as follows: "The act of willing, in accordance with its nature, brings with it as a consequence a surplus of pain. The act of willing which posits the 'that' of the world, or the fact of the world's existence, thus condemns the world to misery, it matters not how it may be constituted. deliverance from this misery of willing, which cannot be directly accomplished by the universal wisdom or logical element of the unconscious idea, because it itself is not free in relation to the will, is effected by the emancipation of the idea through consciousness, since it, in the process of individuation, breaks up the will in such a way that its tendencies, when thus separated, turn against each other. The logical element guides the world-process in the wisest way to the

goal of the highest possible development of consciousness; and when consciousness has reached this it is in a position to hurl volition into nothingness, and with this the process and the world cease. It is owing to the logical element, therefore, that the world becomes a best possible world, a world, namely, which comes to find salvation, and not a world whose misery is perpetuated throughout an infinite time." can certainly be regarded as at most very improbable that the will, which as unconscious is not at all shrewd, should not once more agree to the "sinister fact" or "original accident" of a real world. But then, it must be considered that, even if the chances for and against were quite equal, it would still be a gain, if, while at the present time in which this miserable world exists the certainty of this existence is=1, it should in the state of annihilation fall to $\frac{1}{2}$. Since the foregoing synopsis of Hartmann's philosophy was written, this work has attracted so much attention that it has already reached a seventh edition. One feels very grateful that the advice and example of Schopenhauer have been followed, and that in the later editions, besides the additions and appendices, the text of the first edition has been kept. A very considerable number of works were written in refutation of this new system: and since these were replied to either by Hartmann himself or by those he had gained over to his views, there is already a by no means small von Hartmann literature. On this, the preface to the seventh edition may be consulted, in which fifty-eight works on this system are mentioned as having appeared from 1870 to 1875. This has naturally given greater clearness and precision to Hartmann's views, since the attacks to which he or his supporters replied were made from entirely different sides. Thus, Baron du Prel (The Healthy Human Understanding in the Presence of the Problems of Science, Berlin, 1872) dealt with the materialistic objections of J. C. Fischer (v. Hartmann's Philosophy of the Unconscious, Leips., 1872), in the same year in which Fischer's book appeared. A. Taubert (i.e. von Hartmann's wife), in the work, Pessimism and its Opponents (Berlin, 1873), replied to the detailed criticism by Haym in the Preussische Jahrbücher. In the same work, the objections of J. Bona Meyer, Weis, Knauer, and Hartsen were also examined, with the intention of pointing out to them that there was no contradiction in the addition to pessimism of an evolutionist optimism, which is just what constitutes the difference between von Hartmann and Schopenhauer. Very nearly the same objections were dealt with by Mor. Venetianer in his Schopenhauer as a Scholastic (Berlin, 1873), and his Universal Spirit (Berlin, 1874). Von Hartmann himself was not idle; and he too united with defensive criticism, offensive, but always friendly, criticism. The Thing-in-itself and its Characteristics had already appeared in the year 1871. This is an explanation of his position in reference to transcendental idealism, which he held to be an absolute illusionism, and which he thought Kant himself, in fact, by laying down the doctrine of transcendent causality in the Critique of Practical Reason, had exchanged for a transcendental realism. To this last-mentioned doctrine von Hartmann declares that he also adheres. (It is for this reason that, in the second edition, this work gets the title, The Critical Basis of Transcendental Realism.) The principal point in this work is the proof given of the view that if the Kantian forms of thought are simply immanently valid, objective knowledge is impossible, while their transcendent validity, i.e., the conformity between the thing and our thought, can be explained only by supposing that one and the same reason unconsciously created things, and comes to consciousness in our thought, so that our reason simply reflects the reason that creates. After this work, von Hartmann had A Collection of Philosophical Treatises on the Philosophy of the Unconscious, as well as the anonymous work, The Unconscious from the Standpoint of Physiology and the Theory of Descent, published in 1872 by C. Duncker, whose services in the way of rapidly circulating his works are recognised by von Hartmann with winning frankness and naïveté. In the anonymous work afterwards republished under his name, he attempts to bring the parts of the Philosophy of the Unconscious which had been written before he had made a very thorough study of the theory of descent, into harmony with the teachings of modern science, so far as this can be done without abandoning his principal doctrines, as, for instance, monism, dynamic atomism, etc. Closely connected with the result arrived at in this treatise, namely, that The Philosophy of the Unconscious,—this last attempt to preserve a teleological metaphysic, -may also prove to be the last attempt to preserve a purified faith in God, is what von Hartmann wrote on David Strauss' last work, and

closely connected with the entire contents of the treatise is what he has to say on Darwin, i.e. his Self-Disintegration of Christianity (Berlin, 1874), and his Truth and Error in Darwinism (Berlin, 1875). In the first of the two works, he calls Strauss superficial, because he seeks only to refute the orthodox, and not also the liberal, Protestants. He and they certainly occupy perfectly common ground, inasmuch as they both identify religion with Christianity, and then, because the latter is untenable, reject also the former. It is otherwise with von Hartmann. He admits that the ideal and metaphysical. without which a people would fall back into a state of brutal barbarity, can exist in the uncultured only as feeling; but then he holds that metaphysics in the form of feeling is religion. To take from a people their religion, is to brutalize The Christian religion, however, is antiquated, and what we have to see to is, that modern metaphysics, namely monism or pantheism, should be put in the place of Christianity as religion, and that it should supplant theism, just as pessimism should supplant the out-and-out irreligious optimism. A glance at the history of religion shows that an aim such as this is to be attained only by means of a synthesis of the Indian with the Judeo-Christian development of religion, in a form which would unite the characteristics of both these tendencies in religious thought while excluding their defects. This would make a monopantheism with a much more spiritual worship and a much less egoistic morality than are possessed by Christianity. The second of the books mentioned, that on Darwinism, shows that its author is an unqualified adherent of the theory of descent, but not therefore of Darwin's theory. Darwin, by over-estimating natural selection, which would explain at most differences due to adaptation but not morphological differences, and further by limiting the theory of descent to progressive transmutation, but especially, by the way in which, without more ado, he explains every ideal relationship genealogically, and finally, by his untenable analogies, has changed the theory of descent into a doctrine which, as the example of Strauss shows, may be interpreted in an entirely materialistic way, but also in a way entirely different from this. Von Hartmann, in attacking Darwin's progressive transmutation, appeals sometimes to Kölliker's heterogeneous generation, and sometimes to Baumgartner's metamorphosis of types, frequently also to Wigand, who however,

he thinks, undervalues the importance of Darwinism. result he arrives at is, that all the three factors which constitute the theory of selection, namely, the struggle for existence, variability, and transmission, are only subordinate principles of explanation, just as Darwin's purely mechanical theory of the universe is after all only a subordinate moment in the true organic theory, which maintains the existence of teleology without rejecting mechanism, and which has been set forth in the Philosophy of the Unconscious. The most recent publication of Hartmann's is that which was referred to above (§ 344, 5): Neo-Kantism, Schopenhauerianism and Hegelianism (Berlin, 1877). This is a revision of some things which had been previously published, and is closely connected with an essay on the course of the development of German philosophy from Kant to Schelling's system in its latest form, which is contained in the Collected Studies and Essays. Just as in the former work his relations to Schopenhauer, Hegel, and Schelling had been discussed, so in this essay he defines his position in reference to the tendencies of thought at the present day. Lange and Vaihinger, Frauenstädt and Bahnsen, Volkelt and Rehmke are carefully criticized in pairs under the headings supplied by the title of the book, particularly in reference to those points in which they differ from the philosophy of the Unconscious. The polemic is objective and dignified. Only one thing seems to have annoyed him so much that he cannot conceal his vexation from the reader, namely, that Vaihinger should contrast the philosophy of Dühring with the philosophy of the Unconscious as a diametrically opposite type, and should maintain that Lange goes beyond the one-sided views which are represented by these two philosophies. Since in the case of an antithesis of this sort the suspicion always arises that equal importance is being attributed to the two parts which form the contrast, and perhaps even to the authors of these, and this often to a much greater extent than was intended by the person who framed the antithesis, we can scarcely blame von Hartmann for being so annoyed. The almost nasty way in which Dühring refers to what has been done by others, and particularly to von Hartmann's work, would in itself make an author of refinement who even when he is controversial is always polite, feel that an injury was done him in being put in company with the former. Besides all this, there are contrasts of so peculiar a

sort that the antipathy could not but increase. Vaihinger has gone so carefully into these as thereby to prove that he has a right to place the two systems side by side—though hardly their authors. To the contrasts which have been brought forward by him, several more might still be added, and among these the following, that von Hartmann and Dühring divided the legacy of abusing professors and professional science, which was left by Schopenhauer, in such a way, that while the former takes quite a special pleasure in jeering at the science of professors, the latter, on the other hand, is never tired of giving a dressing to the professors of science. (Von Hartmann chose a more magnanimous opponent than Dühring, as the latter has experienced to his cost.) [Von Hartmann now lives in retirement near Berlin. His most important works since the appearance of the last edition of these Outlines are the following: The Religious Consciousness of Humanity in the Stages of its Development, The Religion of Spirit, which, the author tells us in the preface to the latter, "are related to one another as the historical and systematic parts of a philosophy of religion" (both 1882), and German Æsthetics since Kant; 1st, or Historical and Critical, Part, 1886; 2nd, or Systematic, Part, 1887 (Duncker, Berl.). An English version of the Philosophy of the Unconscious, in 3 vols., by Coupland, appeared in 1884.—Ed.] Like v. Hartmann, Eugen DUHRING, who is nine years older, was also born in Berlin. Like Hartmann, also, he was obliged, by a physical calamity (loss of sight) to give up his earlier vocation of a practising jurist, and devote himself exclusively to the study of science. He did not, however, confine himself to the work of an author, but qualified as a lecturer on philosophy and political economy in Berlin. He appeared as an author in both subjects at the same time. The prefaces to Carey's Revolution in the Doctrine of Political Economy and Social Science (Munich, 1865), and to the Natural Dialectic (Berlin, 1865), were written in the same month. Connected with the first of these are, Capital and Labour (Berlin, 1865), and The Critical Basis of the Doctrine of Political Economy (Berlin, 1866), the latter of which occasioned a memoir written by order of Privy Councillor Wagener, which led to a quarrel between the two men that did not reflect credit on either. Carey's Detractors (Breslau, 1867); The Critical History of National Economy and Socialism; and the Course of National Economy, which reached a second

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edition in the years 1875-76, also belong to this division of his writings. On the other hand, connected with the Natural Dialectic, we have The Value of Life (2nd ed., Leipsic, 1877); the Critical History of Philosophy (2nd ed., 1873); and the Course of Philosophy (Leipsic, 1875). None of Dühring's writings has made him so widely known as the work to which the prize was awarded by the Göttingen philosophical Faculty, Critical History of the General Principles of Mechanics (Berlin, 1873). It is true, also, that it proved fatal to him, for the additions in the second edition (1877) led to his being deprived of his lectureship. Since, according to Dühring, philosophy has to establish the principles not only of a theory of the universe but also those which apply to the conduct of life, and since the conduct of life is for him the more important of the two, he lays especial emphasis on disposition in the philosopher. In accordance with this, he has brought into special prominence in his History of Philosophy those philosophers who in his opinion gave by their character new impulses to their contemporaries and to posterity. Among these, he counts Schopenhauer, not on account of his doctrines, for they are treated critically, but because he finds Schopenhauer's character so worthy of admiration—an admiration in which he will hardly get many to join. With this harmonizes very well the fact, that in his own case what really incites him to engage in philosophical speculation is the feeling which impels one to search into the meaning of existence and to seek to transform life; that is to say, his speculations are throughout of a passionate character. Passionately to attack everything which prevents us from understanding existence and leads us away from active work, becomes in his case a duty. Since understanding is the organ whereby we comprehend existence, while work has the sensuous present world for its theatre of action, the fierceness with which he falls upon everything which savours of mysticism, or which points to anything beyond the present, is easily explained. He directs his wrath above all against religion, in which the elements of popular disease are entrenched, and which, as the pernicious belief in ghosts, as the hallucination of a delirious fever, etc., is the worst enemy of the true philosophy, i.e. of the philosophy of reality. Materialism, therefore,—in the shape, for instance, in which the two greatest philosophers of the nineteenth century, A. Comte and L. Feuerbach teach it,—

is the true pedestal of the true philosophy, because it delivers us from the spectres of the immortal soul, and a God. Only the quack philosophers, those priests of the second grade, who occupy our university chairs, refuse to admit this merit of materialism. There certainly ought to be no mistake about the fact that the negations of materialism, taken along with their positive complementary truth, that only matter exists, supply only a small part, something like $\frac{1}{20}$ of true philosophy. This, together with the remaining 19/20 of the true positive doctrine of practical life and science, makes up the entire philosophy of reality. The philosophy of reality is really formed into a whole in this way; and therefore the true philosophy allows the validity of materialism, but does not misrepresent it, as, for instance, Lange does, when he overseasons it with the mongrel philosophy of professor Kant. in particular finds its surest foundation in materialism. It is only after our material interests have been satisfied that we are in a position to satisfy our higher interests. So far as the general arrangement of his system is concerned, Dühring seeks in the Dialectic, or higher logic,—which stands related to the ordinary logic as higher analysis does to arithmetic,—to explain the laws of thought, which are at the same time laws of reality. The most important propositions referring to the further development of his system are the following: The inviolable Law of Identity, according to which what is contradictory cannot be thought and cannot exist, does not exclude that antagonistic struggle without which there is no develop-The prevailing conception of infinitude is false, and has arisen from confounding the subjective possibility of always going further with objective limitlessness. the Law of Sufficient Reason is false, because in every case it is necessary to go back to something with which the question as to ground or cause comes to be meaningless. Finally, it is owing to a false preconceived idea, that law and what is universal come to be regarded as convertible conceptions; for even what is purely individual may be characterized by conformity to law. Constant use is made of these propositions when Dühring comes to give an outline of his philosophy of reality in the Course of Philosophy. Since here, in the separate sections, he indicates how many leaves are devoted to each, it is already evident that Dühring is in a hurry to get to what is for him the most important part of his subject,

the practical realization of his principles. After having in the Introduction (pp. 1–16) established the Notion of philosophy (vid. supra), he proceeds to show that the principles of knowledge and will are to be developed in the two principal parts of philosophy, and he then passes on to the development of the former. In the first and second sections (Fundamental forms of Being, pp. 16-55; and Principles of the Knowledge of Nature, pp. 56-127), that being which is the only being. and which is one in itself, is conceived of as limited. This Its elements are permanence and change; and is matter. while the first of these, the atoms with their inherent forces, require no beginning, the second does. This beginning of what takes place must be thought of as having occurred in What we have not as yet succeeded in doing may perhaps be accomplished some day by mechanics, when it has been further developed, namely, to explain how matter, which is similar to itself, came to be in a state of differentiation. By this, the transition from statics to dynamics would be made. To begin with, we must simply allow that the differentiation which has appeared, or, that what has actually taken place, is a fact. Within this, the antagonistic movements are the only means by which something increasingly higher is produced, until what is highest of all, namely, sensation and consciousness, are reached. (It is not quite clear how Dühring can regard the introduction of types or ideas after the fashion of those of Plato and Schopenhauer, as well as his attempts to justify teleology, as compatible with this purely mechanical position.) Life appeared at a definite point of time. It is not for this reason something accidental, for the Dialectic showed that conformity to law and eternity are not convertible terms. Dühring praises in Darwin's theory only what Lamarck had already taught before him. He rejects the additions, and above all the "monkish and Malthusian" theory of the struggle for existence which is a deification of brute force. The supposition that descent alone can explain likenesses he holds to be one-sided, on the ground that similar geological and other conditions must have produced similar effects. He would like, moreover, if, in general, the clear and intelligible conception of increasing combinations were substituted for the obscure conception of metamorphosis, so that the organic may represent only mechanical processes in a combined form. A special section, namely, the third, which

is entitled, Elements of Consciousness (pp. 128-191), is devoted to the highest of all vital manifestations. What has here to be done, is to find out the various processes of consciousness and their material conditions, specifically different from them, without foisting into these processes an imaginary subject which we are accustomed to call a soul. But at the same time we must never overlook the fact, as A. Comte has done, that the physiology of the organs is only a science which helps us to form a theory of consciousness; and this again, in its turn, has itself to take a position in which it can be of service, particularly to morality. Like all processes in the universe, sensation, which fills up a real gap in the universe, also originates owing to the antagonism of forces—is, in fact a sensation of resistance. This is true of every sensation; for touch, in connection with which this antagonism is most plainly seen, is typical of all the higher senses, the foundation of which is always the sense of touch. schematism of the senses, that of Nature is repeated, hence the natural and justifiable supposition that sensations correspond to objectivity. The impulses and passions are for action what the sensations are for knowledge. Since they presuppose sensation, and since the stimulus which produces sensation is present in space and time only, sufficient warning cannot be given against the assumption of mystical effects of the future, such as we meet with in the theory of instincts. presentiments, and the like. The impulse of preservation and the sexual impulse must be taken as representing the fundamental impulses. Along with the end which these impulses have as the end directly sought, there is at the same time the pleasure which accompanies them. (This, however, explains unavoidable pain as well.) But since those impulses have now a double end in view, namely, the preservation of the individual and the species, and also pleasure, there arises the possibility of mistakes. The blunders which are by no means unknown in nature, become in this case in those points of consciousness which by the action of Nature flash up in bodies that are endowed with nerves, false steps consciously made. The passions, too, have been condemned by a hypocritical morality, exactly as has been done with the impulses; and thus there has been no possibility of getting to know that they form the basis of ethical conceptions. Thus, for example. revenge forms the basis of penal justice, and envy that of

communism. This section closes with a discussion on understanding and reason; and the distinction drawn between them is, that the former is the faculty of rational insight, while by the latter is to be understood the faculty of carrying out that insight into actions. The senses and sensations, accordingly, constitute the foundation of understanding, while impulses and passions supply the contents of reason. Hints in the direction of a correct estimate of language are scattered about. The fourth section, entitled Morality, Justice, and Nobler humanity (pp. 192-262), shows us what Dühring has to say in his special line as communistic moral philosopher. we can speak of what ought to be done only where one will is confronted with another, we have to consider the first meeting together of two wills. We have to observe besides, that in every man the brute nature more or less exists, i.e. rapacity and the lust of power, which represent what is left in us of the beast of prey; and then we have to see what shows itself as a direct manifestation of nature, and what has originated owing to some mutual agreement. Natural "resentment" gets a very prominent place in connection with this, and, starting from it, Dühring passes on to law, and asserts that criminal law is the key to all the relations of law. Natural resentment, or the demand for retaliation, which, put shortly, is revenge, is the natural consequence of the violation of freedom, or injustice. It is an arrangement on the part of nature, the aim of which is self-preservation, and it forms the foundation of the most perfect criminal law. Since the community takes over the right of revenge, and forbids the individual to exercise it, it inflicts suffering on the person who has committed the injury; and in order that an expiation may take place, it inflicts on him more suffering than he had inflicted. fact that Dühring carries on a constant polemic against capital punishment, presents an odd contrast to this view.) It is not only, however, criminal law which ought to be based on the principle of reciprocal relations, but the whole of civil law. To get this done, we should certainly require to have a thorough reform of law as it at present exists; for in the law of marriage it countenances marriage by force, in which the woman has become a means of enjoyment for the man without will of her own; and in the law of property it helps capital to take the advantage of labour. There is need of having a humanity of a higher stamp, particularly in regard to these two points.

Until this state is reached, those who are taken advantage of cannot help defending themselves in a way which conflicts with the existing so-called law. The fifth section (pp. 263-340) is entitled Commonweal and History, and pronounces Rousseau's labours to be the only ones which might have given a start to the construction of the free society. The only fault to be found with him is, that he too cheaply sacrificed the individual will to the majority. All exercise of lordship is excluded from the free society, which is therefore something wholly different from the State, which exists only by the exercise of violence—and particularly from the so-called legal State, which, notwithstanding all the objections which have been made against the police-State, is very like the latter. In accordance with his fundamental principle, that a rational atomic theory has truth on its side, not merely in science but in politics as well, Dühring firmly maintains the sovereignty of the individual, and calls for a society in which each one is bound by agreement with all the rest to perform mutual offices of help in the way of protection against injuries. Force is to be rejected even when it serves the cause of justice. The State, as it at present exists, is therefore to be thrown aside, for it is only the product of usurpation. place we must have a condition of things in which even military leaders will be elected, in which blind obedience will disappear, in which there are no judicial castes, in which small communities will take the place of large States; and all who compose these communities will have got beyond the childish notion that there is anything supernatural, and there will therefore be neither worship nor oaths, etc. He declares that Buckle and Comte have done for history what Rousseau did for society; but then they are only beginners. History is nothing but a continuation of the work of nature, and therefore it is not simply a moving in a circle, but a progress, in which the first era, that of religions, is concluded by the French Revolution. This, again, points in the direction of a new era, in which communistic socialism supplies the historical programme of the present day. The disappearance of the State founded on force, and, therefore, among other things, of paid labour, is being brought about everywhere by Cæsarism (in a bastard form by Ministerialism). We see this in the present day also. The importance of separate individuality, of nationality, centralization, and self-government

are fully discussed; and finally, the increase of the value of life is laid down as the fundamental function and the fundamental law of history. The sixth section (pp. 341-385) is devoted to the consideration of this subject; and in the course of the thorough-going attack which is made on Pessimism, a great deal of what had already been said in the Worth of Life is repeated. (It is only the pessimism of Lord Byron. in whom Dühring sees the genius of the nineteenth century, exactly as he sees in Rousseau the genius of the eighteenth, which, as a "pessimism of indignation," finds an excuse in his eyes.) The seventh section (pp. 386-430) is entitled the Socialization of all Forms of Activity; and it gives such an ideal description of the appearance which would be presented by a socialistic commonwealth, in which the journalists would no longer have their incomes in their eye, but only the matters they had to deal with, as almost to suggest to one the state of things represented in Gessner's idvils, in which Tieck missed "some wolf." The eighth section (pp. 431-525) is taken up with the consideration of science and philosophy in ancient and modern society, and prophesies that a time will come when both of these will be the common property of all, and in which there will be no longer special scholars and philosophers, who are simply priests of the second grade. To this coming time the present stands in strong contrast, as is shown in rather a drastic manner in a special chapter. In this chapter Dühring had already practically said all the things which, when he repeated them two years later, led to his being deprived of his lectureship. It is quite intelligible how the suggestions which are thrown out in connection with the description he gives of the present state of things, and particularly how those which refer to the general school in which, after national schools and universities have disappeared, all will receive, if not the same education, at any rate an education of the same value, should impress people as being very It is only, however, he says, by following them, that a condition of science and philosophy will become possible, to which the present stands in the same relation as imprisonment does to free life. The conclusion of the work entitled, The Study and Development of the Philosophy of Reality, contains, in addition to the methodological instructions, an autobiography of the author of this philosophy, written between the lines.—To the principle which is followed in this work: always to say only so much regarding a system as will make clear to the reader what the founder of the system really intended, and how he sought to attain his aim, there remains to be added a personal reason, which explains how the account of Dühring's theories has come to be so full. author does not conceal the fact that, owing to the snappish and rude tone of the writing, owing to the constant repetitions, owing to the unfair assertions made by Dühring, that he was the first to say, or even the only one who did say. things which are to be found in a hundred books (as, for instance, that revenge is the foundation of penal justice, that besides our egoistic inclinations we have sympathetic inclinations—what only Anniceris, Comte, and Dühring have discovered!), the study of this system was a disagreeable task. His account will betray this in some places; but just for this reason he felt that he must avoid giving rise by brevity to the impression, that we have to do here with a phenomenon which could be put off with a passing notice.

6. In maintaining that the Hegelian system was a onesided idealism, Ulrici was at one with Chalybaus, as was pointed out in § 342, 2; only, in the case of the former. the realistic elements with which he seeks to remedy this defect. do not, as in the case of the latter, remind us of Herbart, for whom Ulrici appears to have no special liking. In connection with one who is so conversant with English literature. we involuntarily also think, when he takes to philosophy, of theories which have sprung up on the other side of the One who has heard from Ulrici's own lips, that he did not become acquainted with Locke and the Scottish school till late in life, can certainly not speak of the impulses which the former, and particularly the latter, gave to his philosophical speculations, in such a way as to imply that it was a case of master and pupil. But even one who has this knowledge may doubt whether, if Jacobi had not naturalized the doctrines of the Scotch in Germany, and if Ulrici had not occupied himself with English books and cultivated the society of English people, the form and contents of his writings would have been the same as they are now. We can hardly think that we are any longer in Germany, when we hear him say, that when speculation and empiricism come into conflict, one of the two, and most probably the former, is in the wrong; or, for instance, again, when he says that even the Pythagorean theorem would have fared badly, so far as certainty is concerned, if it had not been verified by measurement. The section just referred to takes up only the first or critical part of Ulrici's Fundamental Principles of Philosophy. The second part, which appeared in the following year, contains the speculative foundation of the system of philosophy, or the Doctrine of Knowledge. Since a great deal of what was here advanced has been repeated in a more concise form in the System of Logic (Leipsic, 1852), of which the Compendium of Logic (Leipsic, 1860) is a synopsis, the tables of contents belonging to all the three works may be here joined together. As the result of the critical part, Ulrici declares that the history of the more recent philosophy proves, that every system which has hitherto been set up, be it dogmatic or sceptical, realistic or idealistic, presupposes the fact of human thought. (This is the case particularly with the dialectic of Hegel, the absence of presupposition in which is a delusion, and the contents of which are made up of what is an impossibility.) The only fault that is to be found with this presupposition is, that those who made it had no proper understanding of what it involved, and of how it was to be justified. Philosophy, which, speaking generally, has for its task to find out facts and establish their laws, must above all explain the fact of thought and knowledge. We have first of all to see what is involved in that fact, and therefore, since thought has been presupposed, what has been presupposed along with it. The question as to what thought means, leads to the following propositions which formulate the fundamental determinations of thought. Thought is activity; but activity is a simple conception which cannot be further defined, since e.g., motion, which some would place above it as being a higher generic conception, is itself a kind of activity. Along with productivity, which accompanies this activity, as it does every other, we have as the specific mark of thought, the act of making distinctions, so that it can be defined as distinguishing activity, though certainly not as simply the act of making distinctions. To this there must be added as a third determination, the fact that thought, by distinguishing itself in itself, becomes consciousness and self-consciousness, in connection with which we may have the distinction, that the one kind of thought reaches this state immediately, while the other reaches it by means of the co-operation of others. VOL. III.

character as distinguishing activity, thought, fourthly, can only think in distinctions, i.e., it can only have a thought while, and in so far as, it distinguishes it from another thought; so that pure thought, i.e., thought without content, is no thought; but every real act of thought contains within it a manifoldness. Finally, in that fact is contained the certainty that thought is in a position to know what is thought of-at least when this is itself-to be what it really is. We have now further to justify these fundamental presuppositions of all philosophy, which, when taken together, may be called the fundamental fact upon which philosophy rests. Since they are fundamental presuppositions, this cannot be done by deducing them from others which lie deeper down. contrary, it can be proved that we are warranted in making them, and that we must make them, and therefore ought to make them, when it is shown that the assumption of their contraries leads to absurdities or impossibilities. Accordingly, the necessary in thought, i.e. the opposite of the arbitrary in thought, is the peculiar criterion of truth; and no distinction can be made between what must be thought, and being. The necessary in thought has a twofold character. It may be bound up with the nature of our thought. In that case it is formal or logical, and Logic is therefore the first part of the theory of knowledge. It has to do with the laws to which, since they are based on the nature of thought as the distinguishing activity, all thought, and therefore, too, what is arbitrary in thought or what is thought of in an arbitrary way, must be subject. From the conception of the distinguishing activity two, but only two, laws of thought are to be deduced These are, the Law of Identity and Contradiction (because in the act of distinguishing there is neither pure difference nor pure identity), and secondly, the Law of Causality, which is based on the distinction made between activity and act. more definite determination of the fact of distinction, or the manner in which the objects compared are distinguished from each other, whether it be as regards magnitude or qualities, etc., is based on certain conceptions, namely, the categories, which precede the act of distinguishing and are so far innate. The various theories which have been held regarding these are criticised, in order to show that they all appear as relatively true, if the categories are conceived of as simply the universal relations of difference and likeness which have to be deduced from the nature of distinction; for in that case it is plain, that besides their logical significance they must also possess metaphysical and psychological significance. categories, according to Ulrici, are to be divided into original categories, such as, being, unity, difference, space, activity, time, etc., and categories which have been deduced. The latter, again, are divided into simple categories of essential character, categories of relation and substantiality, and categories of arrangement. Among the categories of arrangement, that of End is discussed first, notional subordination next, i.e., conception, judgment, syllogism, and finally, the Idea. At the close of each section, however, the relation of the categories to the absolute is explained. In accordance with this, logic ends with the absolute Idea, or the absolute as Idea, i.e., it ends with the thought, that while the Idea of the individual substance is represented by that very essential nature which explains its relation to the universal end, the absolute alone is an end in itself. Connected with the logical categories which have been enumerated, and particularly with the categories of arrangement, are the ethical categories, which, when united to the feeling of what ought to be, supply us with the foundation of ethics. The categories right, good, true, beautiful, are in like manner to be deduced from the distinguishing activity. The necessary in thought, however, in addition to the logical necessity which is contained in it, contains secondly a necessity which is based on the co-operation of factors which exist outside of thought. Not only can I not deny that A=A, and not only am I obliged to lay this down as true, but also I cannot deny and I must lay it down as true, that what is perceived exists. The assumption of idealism in its extreme form, that nothing whatever exists outside of thought, can, when we hold fast to the idea that thought is distinguishing activity, be easily controverted. As thinking, I can think of myself only by placing myself in contrast with what does not think, and therefore material being is a necessary assumption of thought. In the same way, I can think of myself as limited only in contrast to an "other" which limits me, and thus I am compelled to assume the existence of other spirits. Finally, the thought of my being as conditioned, involves the thought of an unconditioned, through which everything is conditioned, so that it becomes imperative to have the thoughts, world, spirit, God.

It is true that, to begin with, the content of these three thoughts is only negative, the not-thinking, the not-I, the notconditioned. The positive complement comes to us, however, through the positive operation of these three, the existence of which we are compelled to assume by the law of causality which is a law of thought, although it is quite compatible with this that our thought may only correspond with what they are in themselves, but may not be absolutely equivalent to them. Just as the realistic view that our knowledge is conditioned by an influence which is exercised upon us, is a necessity of thought, so also is the idealistic view that our knowledge is spontaneous activity. If both realism and idealism can appeal to the necessary in thought, and are therefore standpoints which are philosophically tenable, this does not mean that philosophy ought to adopt a higher standpoint which is above both and which is not that of either; but rather, on the contrary, that the doctrine of the world, of spirit, and of God ought to be developed in a perfectly realistic way up to the point at which Realism sees itself under the necessity of proceeding in an idealistic way (of assuming laws hypothetically, and so on). and at the same time, in a perfectly idealistic way until a point is reached at which we must take refuge in experience, in the definitely qualitative, and the like. We find, however, that not only does Ulrici demand of philosophy what Fichte had found fault with in Kant's transcendental idealism (vid. § 312, 2), but that his doctrine of knowledge gives a summary first of an entirely realistic theory of the universe, and next of an entirely idealistic theory, in order to prove that if both do not confound conjectures with evident proofs, they must come to admit their mutual dependence on each other. here worked out in a sketch has been worked out with greater exactness in two works of Ulrici's which are closely connected with each other, and which have had a much wider circle of readers than his earlier books had. These are God and Nature (Leipsic, 1862, 3rd ed., 1876), and the first part of God and Man, which, under the special title Body and Soul (Leipsic, 1866, in two divisions in the 2nd ed., 1874), contains the outlines of a psychology of man; while the first-mentioned work contains the outlines of a philosophy of nature. (It is these writings in particular which remind us of English works with a similar tendency.) Both works, however, which set themselves the task of constructing an idealism on a

realistic basis, were preceded by Faith and Knowledge, Speculation and Exact Science (Leipsic, 1858), as a sort of programme. In this work, Ulrici seeks to make a contribution towards bringing about a reconciliation between the conflicting claims of religion, philosophy, and empirical science. order to do this, he calls attention to the fact that a great deal not only in religion, but in philosophy and in all the sciences, does not deserve the name of knowledge, but only of faith, although you may call it scientific faith, because the unconditioned necessity, or the unthinkableness of what is different, is not capable of proof. In the further course of the argument, scientific faith is distinguished from purely subjective opinion, from personal conviction, and from religious faith, so as to bring out the fact that when the reasons for and against are of equal weight, the first gives its consent simply in accordance with its wishes; the second, because one side of the personality demands a decision; the third, because the whole, and particularly the ethical, personality makes this demand, while scientific faith rests on an objective preponderance of reasons. In reference to the contents of God and Nature, Ulrici himself remarks that the title ought properly to be, "Nature and God," since the results of modern science constitute the starting-point, while the aim which has to be reached is constituted by the proof of the truth, that God is the creative author of nature and the absolute presupposition of science itself. He develops this proof in such a way that in the separate chapters which deal with science, the scientific coryphæi themselves are introduced and made to speak; and then it is shown that their theories consist in great part of unproved hypotheses, which besides, may be employed quite as readily in the interests of a theistic theory as in those of an anti-religious one. Most of the chapters in the first and second sections, which take up scientific ontology and cosmology, accordingly close in rather a sceptical way. The third, shows that the fundamental assumptions of modern science, atoms and forces, presuppose the existence of some one as their author. The fourth, represents God as the necessary presupposition of science, since all our knowledge and therefore also our knowledge of nature, rests on our distinguishing activity, while this itself is a distinguishing after God, and is an act which presupposes the distinguishing, creative, original power of God. So, too, since freedom is a

condition of science, which comes to exist only by means of conscious action freely exercised, and since freedom again does not come into conflict with the almighty power of God, but on the contrary presupposes it, we reach the same result. Finally, however, it is pointed out, that science also rests on ethical categories (i.e., of order), and by means of these refers us back to the Creator, owing to whom nature is made into the workshop of ethical ideas. The fifth section gives a speculative examination of the idea of God, and of His relation to nature and humanity, in which the idea of God and the conception of creation are described as conceptions which assist and limit our thought and cognition, which we have no exact knowledge of, but respecting which we have a scientific faith, just as in science we have faith respecting an atom, infinite divisibility, and so on. All that we can do, therefore, is to represent these conceptions to ourselves analogically, and so we pass from our own conditioned joint production to the unconditioned self-production, as that is conceived of in creation, which begins with the original thoughts of the world—that product of the absolute distinguishing activity of God. With this there is connected, secondly, the act in which God does not so much distinguish the world from Himself, as rather the manifoldness in the world. In the former act, the world is posited, in the other it is arranged; in the former it is laid down as possible, in the latter it is laid down The two facts that the world is not eternal and yet that its creation is eternal, do not contradict each other. is by carrying out the distinction between God and the world through the various logical and ethical categories, that the conception of God comes to have definiteness and clearness; while the world is in space, space is in God, etc.; God is absolute causality, He is absolute goodness, love, and so on. In the same way, the investigations which have hitherto been made regarding the world supply the data necessary for explaining the transitions from a lower form of existence to a higher, from the inorganic to the organic, and from this to the psychical and spiritual, without having recourse to the assumption of a creative activity on the part of God, but simply of the activity whereby He orders things. They also enable us to see that the aim of creation is that living fellowship with God which is attainable by man. The essence of religion, of the feeling at once of dependence and freedom, which is

called forth by the influence exercised by God on man, is the last point which is discussed, so that the "treatise ends at the point at which ethics, the philosophy of religion, and the philosophy of history, begin their task." Ulrici closes his work, God and Man, with exactly the same words, because it is meant to lead to the same conclusion, by approaching the subject from a different side. As the philosophy of nature shows him especially in the rôle of an antagonist of anti-religious physics, so his psychology shows him to us as the opponent of materialism. He himself defines his task as an attempt to "prove on the basis of thoroughly ascertained facts that to the soul as distinguished from the body, and to spirit as distinguished from nature, it is not only fitting that there should belong, but that there actually does belong, not simply an independent existence but also the right of ruling." With this end in view he discusses in the First, or physiological Part, first the conceptions of matter and force, and in connection with these comes to the conclusion that modern science warrants the assumption, that every existing thing is a centre of forces held together by a uniting force which coincides with the resisting force. From this he passes on to the conception of organism, in order to explain which Liebig, among others, rightly assumes the existence of a special force which forms the primitive organism, namely, the cell, and from the cells constructs a formation which is an end in itself, and which maintains itself in existence until it has gone through the series of the stages of its development. The human body is then discussed; the difference between it and the animal is examined; the purely materialistic explanations of sensation, consciousness, etc., are shown to be untenable; and the admission of the most thoughtful physiologists, who, if it were at all possible, would gladly be materialists, is accepted, namely, that to the physiological processes there must be added an unknown something in order to explain the psychical processes. The nervous system and the soul form the subject of a new section, in which the view is developed, that the soul is to be conceived of as a fluid resembling ether, yet unlike ether in so far as it does not consist of atoms, but is a continuous fluid which spreads itself out from a centre, penetrates the whole body as composed of atoms, and co-operating instinctively with the vital force, if indeed it is not exactly the same as this, exercises the power

of producing morphological structures. Where, again, it rises to consciousness with the power of distinguishing, it manifests the peculiarly psychical effects. A detailed consideration of the organs of sense and their functions according to the most recent investigations by Weber, Volkmann, Fechner, Helmholtz and others, makes up the fifth and last section of the physiological part, in which, quite at the end, he discusses the feeling which is made up of all feelings, mood, impulse, and He then collects together once more all the special facts supplied by the results of physiological investigation which may be used as proofs of the operation of specific psychical forces and of the existence of the soul. In the Second, or psychological Part, he states that consciousness forms the starting and central point of psychology, and he discusses its origin. As in his earlier works, he places this origin in the distinguishing activity of the soul; but it is more strictly determined that it is an act of distinguishing self within self, from which consciousness results, since we cannot deny to the plant a power of distinguishing itself, and accordingly perhaps also the plant has sensation. He then passes on to the conscious soul, treats of it in its relation to its body and to other bodies, and in connection with this, answers the question as to how the soul comes to be conscious of its He next discusses waking, sleeping, dreams, bodily form. somnambulism, mental derangement, temperaments, age, the sexes, races, and nationalities, and ends the discussion by affirming that while the soul certainly stands in a thoroughly reciprocal relation to the body, it is not, though so related, the weaker part, but is on the contrary the predominating factor. The third section treats of the conscious soul in its relation to itself, and especially of its life as manifested in feelings, ideas, and impulses; while in connection with the impulses a distinction is drawn between pure sensuous impulses, impulses of feeling, and impulses of presentation. In the freedom of the will, and in the effort to have this freedom actively realized, we have a manifestation of the highest reach of impulse, which conditions, and is at the same time conditioned by, the highest form of psychical life as manifested in ideas, namely, understanding. In the fourth section, which has to do with the conscious soul in its relations to other souls, he treats of the social impulses and feelings which we owe to nature, of the ethical feelings, ideas, and aspirations, finally of

the education and culture of man, and particularly of the selfeducation of the will, because the essence of man's personality is conditioned and determined by his will. This essence of personality is discussed in the fifth and last section, which treats of the soul in its relation to God. The relation between ethical and religious feelings is here very fully dis-These feelings, although they are not identical, are yet as closely connected together as are the metaphysical and ethical natures of God, and for this reason the one is the complement of the other, and they never can come to be in contradiction with each other. In harmony with what was said in God and Nature, certain views as to the origin of the idea of God are refuted also here, and it is asserted that the real foundation of this idea is to be found in the religious feelings implanted in us by God, and in which the feeling of dependence is united with the feeling of spiritual worth. The religious ideas originate in the distinction we make between the perception of God's existence which we owe to feeling, and what is contained in other perceptions. These ideas are various; but the religious feeling is only one, though certainly at first so tender and weak that it can at a very early stage be further developed or dimmed and checked. Hence the differences which exist among children. With the Psychology Ulrici's Outlines of Practical Philosophy (Leips., 1873) is closely connected; and he accordingly unites the two together under the common title, God and Man. The intention of the Outlines is to sum up the leading ideas of his theory of the universe. This work has not yet been completed, since of the three parts into which his practical philosophy is divided, he has only finished the first, Natural Law, and is still occupied with the Ethics and Æsthetics. The ample general introduction (pp. 1–208), in which he lays the groundwork of his views, stands, as will be readily understood, in close relation to all the three parts of the practical philosophy; but it is not till towards the close that he comes to take up in a special way natural law. He first recalls the principal propositions contained in the earlier works; and these constitute the presupposition necessary for the practical philosophy. From the Logic, he takes the propositions, that conscious thought consists in the power of distinguishing; that all knowledge rests on certain fundamental facts, which, because we cannot doubt them, constitute the necessary

element in thought; and that knowledge, in the course of its further development, is bound by certain rules, which we call the laws of thought and the categories. From the Psychology, he takes the proposition that the will is distinguished from the theoretic faculty by the fact that it manifests effort, from the simple desires by its being capable of putting itself in opposition to the impulses, and by having the capacity of considering and resolving. With this is connected the fact that it distinguishes itself from the impulses, or has the consciousness of freedom. Herewith stands or falls the truth which forms the foundation of all ethics, namely, that we have the feeling that we ought to be or do this or that—a truth which rests on the fact that we cannot think of freedom apart from consciousness. No one is without this feeling, although in the case of many it never reaches the conscious stage. The feeling which is expressed by the word ought, points to the truth that man is determined by ethical considerations, and becomes intelligible only when man has an ethical aim set before him. This aim, which is ethical perfection, consists in the highest possible culture of the spiritual Since, as psychology teaches us, these are the powers of cognition, will, and feeling, the ideas which correspond to them, namely, those of the true, the good, and the beautiful, are the fundamental ethical conceptions or categories which more definitely determine what constitutes the feeling that we ought to do this or that. All three are submitted to a very careful examination; and it is shown that an ethical character belongs in particular to the aspiration after truth which is the foundation of the two others, and this, because its origin is not be found in sense, and because it seeks after law and order, and pursues an ideal. In the same way, it is shown with regard to the idea of the beautiful, that it has to do with man's power of representation, which is dependent on the will, and therefore has an ethical character. In the last section of the introduction, which treats of the relation of ethical ideas to one another, the result reached is, that none of the three should take precedence of the others, and that their united realization is the task of reason, by which, therefore, we are not to understand a special mental faculty, but the ethical, active exercise of all the faculties. Philosophy, as the science of reason, must of course be guided by all three Still, a difference manifests itself in its different parts.

Ethical presuppositions should not be mixed up with investigations into nature, history, etc., or in general into what is given in experience, so that they may not falsify the result. The law here is, that the investigation of truth should be conducted with an entire absence of all presuppositions. We can only base ethics on the results arrived at in a thoroughly independent way in the fundamental departments of knowledge, so that the evidence supplied by these constitutes the startingpoint of ethics, namely, that truth is knowable only because its nature is ethical. When philosophy has gained a knowledge of this truth, it becomes what it essentially is, not only in its final part but all throughout, namely, practical philosophy, though, if we take it in connection with the two ideas of the good and the beautiful, it forms a part of practical philosophy as ethics in the narrower sense, and æsthetics. The remainder of the book (pp. 211-540) is occupied with the first part of ethics, namely, Natural Law. Since law embraces all those conditions under which subjectivity can maintain itself and develop further, and since this development is an ethical duty, the law of nature and ethics are related to each other as means and end. Ulrici accordingly demands that the one should be most strictly separated from the other; and not only does he attack Trendelenburg, who nowhere separates the one from the other, but the Hegelian view also, according to which moral communities get a place neither in the doctrine of law nor in the sphere of morality, but in a third sphere,—finds in him an opponent. Marriage and the State are in his opinion simply legal institutions; and where, accordingly, those obligations which are not compulsory are discussed, we are put off with a reference to the doctrine of morals; or they are wholly passed over, as in the case of credit; or else, when he cannot avoid touching on them, as for instance, in the case of patriotism, they are quite briefly mentioned. It is precisely on account of the fact that the State is discussed here as a legal institution, that we can understand why the division of law into the law of property, the law of contract, and the law of persons, which was worked out in the first section, is repeated in the last; while, in the place of the forms of government which are usually referred to,—such as monarchy, etc., and which are put aside as "empty abstractions,"—he introduces, the state of property, the state of contract, the state of persons. We are constantly reminded of the close connection between the separate discussions and their ethical basis in the feeling of duty and obligation, by the fact that he almost always establishes a right by reducing it to a duty. What I ought to do I may do, is the formula to which many of Ulrici's deductions in connection with law may ultimately be reduced. If it were not that quite towards the end of the work he says of the feeling of right, which is rooted in the ethical nature of man, that in the last resort it is rooted in God, as man's ethical nature is, and that God is really absolute law, the principal title, God and Man, might seem to have been quite lost sight of. He here promises, at least, to show in the doctrine of morality, that the same holds good also of natural law.

7. Although the existence of points of contact with more than two different systems can be proved in the case of some of those whose views have just been characterized, still their standpoint had pretty much taken a definite form before they appropriated anything from others, and therefore their doctrines could be described as children of a monogamic marriage. It is otherwise with a man who, even when quite young, felt the truth to which he gave expression in ripe manhood, namely, "that philosophy will never attain to a condition of permanence until it grows as the other sciences grow, and does not with every new comer propound the problem afresh and then drop it again, but takes it up historically and develops it further." In accordance with this idea, and before his views had settled down into a completed theory of the universe, he devoted himself to a thorough study of wholly different masters. ADOLF TRENDELENBURG, born in Eutin on the 30th of November, 1802 [died in Berlin, Jan. 24th, 1872, after a remarkably successful academic career of nearly forty years.—Ed.], had had, even from his school-days, and particularly owing to the influence of the Kantian König, his attention directed to those philosophical studies which form the basis of speculation, and was well versed in formal logic. He was led to make a more thorough study of philosophy by K. L. Reinhold, but particularly by Von Berger, whose influence may be recognised even to the last in his characteristically sensuous language, which borders on poetry. He threw himself at once into the study of the greatest philosopher of modern times, Kant, and of the greatest philosophers of antiquity, Plato and Aristotle. The more careful

his study of these philosophers had been, the more he felt himself compelled to recognise the value of their originality; and when he began to occupy himself with Hegel, the fact that the latter,—who assigned these philosophers their place in his terminology,—" proceeds unhistorically and turns them into Hegelians," was not the least powerful of the reasons which roused him to oppose Hegel. When at a later period he became acquainted with Herbart, his views were already formed, so that he got more help from the opposition which Herbart's theories produced in his mind than from his agreement with him. On the other hand, the works of Karl Ferdinand Becker on the philosophy of language had a very important influence on his views. The value of Becker's labours became the more evident to him, the oftener he found that in the development of his own speculative thoughts his views coincided with those of Becker. He became known to the public as a man of philological and philosophical culture by his very thorough works in Latin on the Platonic Doctrine of Ideas and Doctrine of Numbers. In the year 1833, he obtained an extraordinary professorship in Berlin; and while holding this he published his justly valued edition of Aristotle's work on the soul (Berlin, 1833), which was accompanied by an admirable commentary. In the year 1837, he was elected ordinary professor, and gave as his inaugural address a Latin dissertation on the Philebus of Plato (Berlin, 1837). His first lectures had to do with the history of philosophy, and the next included logic within their range, and by degrees almost all other departments of philosophical study. His thorough knowledge of Aristotle, as well as his theoretical and practical acquaintance with dialectic and the needs of schools, enabled him to publish the Elementa logices Aristoteleæ (Berol., 1837). It is a collection of propositions taken from Aristotle, accompanied by a translation and commentary, and is meant to further the study of logic in schools. It was very well received, and has been frequently reprinted. He afterwards added to it explanatory notes for the use of teachers. His efficiency as an academic teacher was very great. addition, he developed a truly remarkable activity as Secretary of the Academy. His standpoint, the basis of which is given in the Logical Investigations (Berlin, 1840, 2nd ed., Leips., 1862), has remained unaltered since the publication of that work, so that the second edition can be called only an en-

The additions consist for the most largement of the first. part of criticisms of works which had appeared or had become better known since the publication of the first edition. devotes a great deal of attention to the later doctrines of Schelling and to Schopenhauer. Two controversial essays, which appeared first in the Neue Jenaische Allgemeine Literaturzeitung, and afterwards under the title, The Logical Ouestion in Hegel's System (Leips., 1843), are connected with the work just mentioned, and were occasioned by the attitude taken up by the Hegelian school to that work. Trendelenburg's Historical Contributions to Philosophy, appeared in the year 1846 (Berlin). While the second volume, which appeared in 1855, and the third, which appeared in 1867, contain almost nothing but reprints of some academic papers, we have in the first volume two new papers joined together under the title, The History of the Doctrine of the Categories. The first of these, on Aristotle's doctrine of the categories, works out in a more thorough way the thought which was first given expression to by Occam (vid. § 216, 5), and had been developed by Trendelenburg himself in his Latin dissertation, namely, that Aristotle had reached his categories under the influence of his grammatical sense (cf. supra, § 86, 6). The second, gives a history of the doctrine of the categories from the time of the Pythagoreans down to the date of the appearance of his own Logical Investigations. Many of the academic papers refer to Leibnitz, Frederick the Great, and other personalities who are of importance for Prussia, as was necessarily to have been expected in addresses delivered on the anniversary celebrations of the Academy. The critical remarks on Herbart deserve special mention, and above all the paper entitled, On the Final Distinction between Systems, and the other connected with it, On the Fundamental Ideas of Spinoza and their Results, which have been very widely read. We may mention, lastly, the Natural Law on the Basis of Ethics (Leips., 1860, 2nd ed., 1868), the first and only "advance into the sphere of reality," with which he had followed up his Logical Investigations. To the twenty chapters which this latter work originally contained, three are added in the second edition; the First, which treats of logic and metaphysic as the fundamental sciences, the Tenth, which, under the heading "End and Will," contains a detailed criticism of Schopenhauer, and the Twenty-third, which is entitled "Idealism and Realism."

The line of thought pursued in the work, as thus enlarged, is in substance as follows: (I.) All the sciences flow over on the one hand into metaphysics, when they come to a point at which the special grounds upon which they rest pass over into the universal ground, and at which their special object is marked off as distinguished from existence in general; and on the other hand,—in virtue of the fact that each science follows a definite method which excludes mere opinion,they flow over into logic, which investigates thought. science which seeks to comprehend the essential nature of science, and aims at being the theory of science, must for this reason embrace both metaphysics and logic. It may be called Logic in the wider sense. It has to explain how knowledge is possible, and how that to which all science points, namely necessity, is possible, and wherein it consists. The fundamental science sought for, is supplied neither by formal logic (II.), which, as such, has been in existence only since the time of Kant, and has no right to call itself Aristotelian, and which does not really make good its pretension of abstracting from matter; nor by Hegel's dialectic method (III.), in which "pure" thought is able to start only by the help of the perception it despises, and by foisting in concrete thoughts, particularly that of motion. The problem (IV.) of this fundamental science is to abolish in consciousness the opposition between thought and being, for it is in the reconciliation of the two terms of the opposition that knowledge consists. It has therefore to give an answer to the questions: How does thought get to being? How does being enter into thought? That which mediates between the two can only be something which is common to both; and since it does bring about a mediation between them, it must be active. We have therefore to seek after the form of activity which is common to thought and being; and it must be a form of activity which is not based on any other form, but which, as the foundation of all others, is known only through This we find in motion (v.), of which, since repose itself is only the equilibrium of motions, all being consists, and which, since every act of perception is an act of construction, belongs essentially to thought. To external motion as connected with being, there corresponds the inner constructive motion in thought which we call perception, and which is indicated particularly when we use the words whither? for

what reason? ground, consequence, end, etc., as describing what are simply relations of motion. It is impossible to give a definition of motion; and in all the definitions that have been attempted, it is already presupposed. The same holds good of space and time (vi.), out of which it is customary to construct motion, instead of recognising them to be products of motion, or sides of it which have been obtained by abstraction, and which, exactly like motion itself, are forms of being and thought. (At this point, he inserts a very full criticism of the theories of Kant and Herbart regarding time and space.) This original productive activity of spirit, which is the counterpart of external motion, enables us to posit objects a priori (VII.), and yet to be sure of not having their existence disproved by being, just as is done in the case of mathematical knowledge. But an a priori element is mixed up even with sense-perception, because this takes place only where the motion of what produces the influence is met by the motion of the thinking subject. It is certain that the consideration of sense-perception brings us to something which cannot be deduced from motion, namely matter, however welcome it might be, so far as the theory is concerned, if we could regard Kant's construction as satisfactory. Although it is known only through motion, and although we can therefore understand it only in so far as we reduce it to motion, still there is always left over an irreducible residuum; and we are thus compelled to adopt, in addition to motion, matter, as a second principle. On the other hand, the conception of motion completely suffices to define matter, and therefore mathematics, the fundamental conceptions attached to which are in this chapter deduced from motion, form an a pribri science. (It is at this point, that Hegel is criticised with special fulness.) This does not, however, mean that it presents us with an act of thought which is divorced from perception, or the reverse. Speaking generally, no such separation exists, for discursive thought is the abbreviated expression of intuitive thought. The conception everywhere calls for the accompanying perception; and the highest form of knowledge is the a priori knowledge which finds its completion in experience. If the results which followed simply from the conception of motion supplied us with the fundamental conceptions of mathematics, such as point, line, number, etc., then by uniting with it the additional conception of matter, or material substance,

we arrive at the real categories (VIII.), which may also be called physical categories. By these, therefore, we are to understand those points of view necessary to thought, -under which what moves itself must be placed, because it is subordinate to thought,—or, as we may call them, the conceptions by means of which thought seeks to express the essence of things. First of all, we get from the creative act of motion, the relation of the producer and the produced, i.e., causality, in which the effect follows from the efficient cause. While from this category we can deduce that of form as a subordinate category, and oppose it to matter which is given in experience, as causa formalis and materialis, there is a real necessity for making the transition to the category of thing or substance, a transition which is indicated by what is done in language, when the products of the producing activity—the verb—are turned into substantives. Substance is the permanent product of causality; and substance itself, when thought of as the starting-point of new motion, has quality. Along with it, we have the categories of quantity and measurableness, which result from the union of the fundamental mathematical conceptions with substance; and finally, in the same way, we get the combination of unity and multiplicity which is present in the relation of inherence. The relation of quantity and quality is treated differently in the second edition from what it is in the first; and the relation of the whole and the parts is much more fully treated. But of all these categories which are to be deduced from motion, we must always regard the first, the causa efficiens, as the main category. In the further course of the investigation it is accordingly always introduced in place of all the rest; exactly, in fact, as Kant is in the habit of allowing causality to make him forget the other eleven. Just as the transition from the mathematical conceptions to the physical, was made by the addition of a new principle, namely, matter, so the conception of End, which it is equally impossible to deduce from motion, opens the way for entering into a new sphere (IX.). It is true that the form of the expression, For what reason? Whither? signifies that it may be united with motion; but it is clear that it stands in diametrical opposition to the Whither of the efficient cause, since this makes the parts precede the whole; while in the realization of the end the relation is reversed, and what comes later is turned into what is earlier. The fact of the existence VOL. III.

of the end in connection with all the phenomena of life, is quite certain; but it is as certain that end in nature, as representing a definite form taken by being through the agency of thought, is understood in a wholly different way from that in which we understand the efficient cause. We understand that nature works in conformity with an end, only because we are able to realize our ends in nature. The organic is a preliminary stage of the ethical, and becomes intelligible by means of the latter. By the addition of the conception of end, the real categories which have been considered, get quite another significance (x1.). They become organic categories, just as, by the addition of matter, the mathematical categories became physical. The efficient cause, as serving the end, becomes a means, and the substance, a machine or an organism, according as the end lies outside or within the Matter in this case becomes organic matter, and form becomes articulate form, as we see it in beauty. In the same way, it is at this stage that the whole and the part, in the proper sense of the words, first come into prominence, and the part thus becomes a member of a system, etc. As for the end, we find that it constitutes the basis of moral conceptions; so that those fundamental conceptions which were formed independently in the mathematical sphere, find their content in the physical sphere, acquire depth in the organic sphere, and get an elevated place in the ethical sphere. (Let any one compare figure, substance, organism, person.) Besides, this end which dominates the organic and ethical stages occupies a higher place than the efficient cause, while the mathematical and physical stages are under the power of the latter; but it does not therefore come upon the efficient cause blindly, like a fate, but is the providence on whose account the cause exists.—We have now to pass to a conception which co-operates in a silent way with the already considered fundamental conceptions relating to the production of effects. This is the conception of negation (XII.). It has a real significance only as the repelling force of an affirmation, and therefore only as resting on something positive. Pure negation exists only in thought. Opposition is different from negation, since things that are opposed do not unconditionally exclude each other, like affirmation and negation, but may come together in something which is common to both. And again, contradiction is also something different, exists only between

thoughts, and can occur in connection with reality only where phenomena are related to an end or thought, which underlies them. (Think of anxiety, and the like.) It is unjustifiable, therefore, to turn the proposition of contradiction into a metaphysical principle. Its value consists in its being a dialectical direction to maintain everything in its individual definiteness, and therefore it is of use where a conflict arises (cf. supra, § 86, 5). By taking up the consideration of the modal categories (XIII.), the Logical Investigations pave the way for the transition to the solution of the second question which was referred to Logic in the introductory chapter, namely, How does knowledge come to have the character of necessity? The categories which express the relation of the thing to the thinking spirit-those of modality-are first of all; appearance, which corresponds to sense; and ground, which corresponds to understanding. A more thorough investigation into the nature of the ground leads to the distinction between the grounds of fact and the grounds of knowledge. are either efficient causes or ends; the latter are constructed either out of the effect or the cause. As the cause contains a multiplicity of conditions, so the ground contains a multiplicity of moments. If all the conditions are known, and thus the whole ground understood, we get necessity; when this occurs only partially, we get possibility. The former,—resting upon a community of thought and being, to which thought, which seeks to escape, must yield itself a prisoner,—coincides with the universal, or rather has the universal as its ground. This, again, can itself be partly the universal element which belongs to the actual fact, and partly the universal element which belongs to the ground; while in its manifestation, we have the identical or unalterable. The further question now arises as to the forms in which thought solves the problem, the possibility of which has so far been demonstrated (xIV.). These are the forms and combinations which must of course correspond to those of being. Judgment corresponds to activity, conception to substance; and accordingly, as language gives a substantive form to the manifestations of activity—in the infinitive—we get a stage of judgment which lies at the basis equally of the conception and the development of the judgment. The conception (xv.),—as the substantial form of what has spiritual content, or as substance conceived of as universal,—requires the accompanying general image, and

accordingly never appears without this image. The substantial element in it constitutes its content, while the universal element forms the sphere in which it works. The former is formulated in definition, and the latter in division. Genetic definitions and divisions, which are formed out of the essence of things, alone fulfil the requirements of science. Trendelenburg next takes up the forms of judgment (xvi.), in which the conception takes an active form; and which, in accordance with this, appears as judgment of the content, in which the subject is universalized, and judgment of the extent, in which it receives specification, or categorical and disjunctive judgments. The theories of Kant and Hegel are criticized in detail, and he then passes on to proof (XVII.), where he discusses the difference implied in the contrast between induction and syllogism, and that between the analytic and synthetic processes, and refers to the impossibility of separating the two latter. The treatment of the syllogism (XVIII.) is prevailingly critical. Of the positive determinations, the most important is the following: That which in the sphere of the real is the ground, is in the logical sphere the middle term of the syllogism. Where, accordingly, the ground of the real and the ground of cognition correspond, knowledge is complete; and therefore the true deduction from the conception (xix.), is the genetic process or development. It is based on the fact, that the thing is known out of the grounds which produce it. If these consist only of the efficient cause, then it follows the cause alone; when, on the other hand, the end determines the efficient cause, then this end becomes the leading thought to the same degree that it conditions the origin. The indirect proof (xx.) constitutes the opposite of the genetic proof; and although it is of less value than the direct, still, if we take principles into account, it is the only possible one. The system of knowledge (xxi.), as knowledge of the whole, is really the extended judgment, and is the spiritual type of the world. Since the fundamental science has answered the two questions as to the possibility of knowledge, and the necessity of mathematical, physical, organic, and ethical knowledge, the system of knowledge takes such a form, that four parts of philosophy, as representing the universal science, or science of the Idea, which is different from the special sciences, are built up upon logic and metaphysics, which presuppose the particular sciences.

The third, which treats of the organic, will have to end with psychology. All of them together, however, have to do only with the finite. The Unconditioned (XXII.), to which everything points, and of which therefore the world supplies an indirect proof, would, even if the whole world were known, be no object of scientific knowledge. Accordingly, the arguments for the being of God-which are fully gone overhave value and even truth, but have no demonstrative force. Nesciendo Deus scitur. The organic (and ethical) view of the world, still more than the mathematical and physical, brings us to recognise a whole which conditions everything, and in which the world and what is in it have their determination. By means of this knowledge, it turns the Notion of each thing, i.e., the law of its formation, into its Idea, i.e., its final determination. Accordingly, it is itself idealism (XXIII.), but not the kind of idealism which itself shuts up the passage to reality. This latter, however, is only a dream of the representative faculty; it possesses only a world of eidola, and is most fitly described as eidolism. A retrospect (XXIV.) presents us with a summary of the whole course of thought, in which emphasis is once more laid upon motion and end as being the forms of activity which are identical with thought and being, and in which the organic theory of the universe is extolled as that which makes possible a subordination of the real to the ideal, and a realization of the latter in the former.

8. Any one acquainted with the subject will have his attention at once arrested, in studying the Logical Investigations, by the elements which have been specified above. If we consider, besides, how Trendelenburg at the same time takes note of all the more important recent intellectual phenomena, and improves, accordingly, his own theories, whether by appropriating the new ideas or by rejecting them, then he more than any other must be described as an historical philosopher. The work of Bratuscheck, which is referred to further on, and which no one will suspect of seeking to minimize Trendelenburg's merits, shows that his main thoughts, at least, have been borrowed from Reinhold, von Berger, K. F. Becker, Plato, Aristotle, and others. But it is also evident, that the elements derived from ancient philosophy outweigh the modern elements. Not only is there proof of this in the fact that, while, as the critic of Hegel and Herbart, he carries his rigour the length of word-catching, he defends with

[§ 347, 8.

loving piety even what are manifest errors in Aristotle; and not only is it proved by the way in which he censures Schelling for having taken Aristotelianism simply as a springboard,—the opposite of this is to take it as a foundation,—but we have his own express declaration that the organic theory of the universe, the basis of which was laid by Plato and Aristotle, is the only philosophy which has a future before it; and that speculation done by fits and starts and by every man for himself, has proved itself to have no permanence. All systems may at bottom be reduced to one of three standpoints: to that in which the efficient cause, blind force or blind matter, is put above everything, Democritism; or to that which, in contrast to this, the End occupies the highest place, Platonism; or, finally, to that which seeks to establish the indifference of that contrast, Spinozism. Trendelenburg expressly declares his adherence to the second of these standpoints. This Platonizing, or rather, this general running of thought into ancient moulds, with which is connected—and not by accident only—the noble and elevated language which distinguishes his works, comes out in a very special way in his Natural Law. The second edition, which appeared eight years after the first, is described as an amplified edition. It is, as a matter of fact, simply enlarged by additions, the most important of which are mentioned in the preface. Among the additions which are not especially referred to by himself, attention may be called to certain remarks directed against Schopenhauer. In connection with what was stated in the Logical Investigations, he shows that, since the ethical represents an advance on the organic, in treating it philosophically we must take into account not only its ethical necessity but also its physical and logical necessity. here in dealing with the ethical it is only Law which has to be considered, we have first of all to establish the Idea of law, i.e. its final determination, as this shows itself to be in harmony with the inner end or design. This is done in the First Part, in which, in addition to the ethical side of the Idea of law, the physical and logical sides are also treated of. The two latter have to do with the means whereby law takes an active form. Thus, for instance, in compulsion, law takes physical force or the efficient cause into its service; in a legal process it makes use of the logical syllogism, of induction, etc. The ethical side is accordingly the most essential, and

is taken up first by Trendelenburg. The most important point in connection with this is the very decided attitude of opposition which he takes up in reference to the separation made by Thomasius and Kant between the legal and the moral. Even the mediation between these, which Hegel found in the sphere of the ethical, does not content him. He makes no distinction between the ethical and the moral, and insists on a return once for all to the standpoint represented by the joint views of Plato and Aristotle, in which the two were not as yet separated. The chief aim of the work is in the direction of emphasizing the ethical elements in the various relations of law, so as to combat the false dependence of juridical law, which not only distorts the theory of law, but also in life deprives it of its due value. What narrows ethics, as represented by Aristotle and Plato, is that they do not rise above the point of view of the ancient world, according to which there is nothing higher than the State and the citizen. The Christian view puts man and humanity above both of these, and, as it passes through the various ages, comes to regard man not only as a political but as an historical being. The principle of ethics, therefore, is human nature in itself, or, in the depth of its Idea and in the wealth of its historical development. Man is accordingly a member of the whole, a member of the ethical organisms, a connected whole in which the individual is strengthened, in which the whole separates into organic parts, and in which both are mutually complementary. The elevation of the individual to the state in which he is adequate to his Idea and realizes the inner end of his being, which is to raise himself from the sensuous to the spiritual, is the realization of the idea of the good, or of perfection, which, according as it manifests itself in disposition, in intellectual insight, or in representation, is the good, the true, or the beautiful. disposition takes us back to religion, to exclude the latter from ethics, as Hegel does, is all the more a mistake, that historically States rest on a religious basis. The realization of the ideal man in society and in each individual is accordingly the ethical principle; and all ethical systems which have hitherto been constructed, emphasize either the one or the other of these moments. In the moral whole, law is defined as the substance of those determinations of action by means of which it comes about, that the moral whole and

its organic parts are maintained and can take on new forms. With this determination of the conception of law there is connected in the second edition a detailed analysis of it, occasioned by the objections, in which he explains, among other things, why neither what is generally approved nor the possibility of using compulsion, was included in the definition. So. too. what had already been shown in the first edition, namely, that this definition appreciates the importance of the law of custom and makes intelligible an historical development of the ideas of law, is illustrated in the second edition by a series of examples taken from the history of law. After having defined the conception of law, he explains what is unlawful or wrong, and passes on to the physical side of law, i.e. both to those phenomena in which the physical is a limitation of law, and to those in which it is a means employed by law. He here discusses compulsion and punishment, i.e., a diminution by law of personal existence with the express aim of counteracting a wrong committed. In reference to capital punishment, he declares himself to be opposed to those who allow to the murderer an unconditional right to his life, without however maintaining the necessity of precisely this form of punishment. The logical side of law, to which he next passes, shows itself both in its origin, where we have analogies of law and definitions, and in its application, where we have interpretation of laws, subsumption under these, weighing of evidence, etc., all of which show us pure logical activity engaged in the service of law. After having thus in the First Part investigated the principles of law, he proceeds in the Second Part to deduce from these principles the relations of law. Although Trendelenburg lays special stress on the fact that man in his individuality is never an accidental abstraction, and accordingly declares himself to be most decidedly opposed to the so-called rights of man, which are supposed to accrue to the individual apart from society, he yet considers it necessary, "in order to get a sure start and a clear general idea of the relations of law," instead of beginning with the family, which is the first source of the relations of law, to begin with the person as the basis of law. Thus, it is after he has taken up property and general intercourse, that he passes on to the law of the family, which, according as we deal with its beginnings, its definite existence, or its dissolution, takes the forms of marriage law, domestic law, or

the law of inheritance. In connection with the last-mentioned. he sees in the right of the heir to refuse the inheritance a refutation of the view that the property is left to the family in intestate succession; and he accordingly takes the disposal of the testator as a moment in addition to this, so that the bond of families and possessions here constitute the constructive principle of law. This is followed by the consideration of the State, which is treated of according to the relation in which it stands to property, according to the different orders in it, as government or authority, and finally according to its general constitution. Force is certainly the foundation of the State; but the end sought which first justifies force, is the determination of man, the development of man as a whole. Accordingly. in a way similar to that followed by Plato, only with still greater detail, the State is considered as the universal ideal It would be improper to treat of civic society before treating of the State; and if Aristotle treats of the community before the State, he follows only the beginnings of history; but this arrangement is not suitable for things as at present constituted. The opposite views of the State held by moderns, who look more to the individual, and by the ancients, who consider the whole more, are contrasted as national-economic and political, while the State of the statesman, or the royal State, is placed above both. For the expression, "the powers of the State," Trendelenburg substitutes, "the functions of the State," as it is only the State which has power; and he connects his views with those of Constantin Frantz by drawing a distinction between government, military power, legislation, and administration of law. The aim of all State organization is to exhibit, in the reciprocal relation of the parts to the whole, the firmest and most beneficial unity of feeling, intelligence, and power. There is, therefore, no best form of the State. The two pure forms of monarchy and democracy are carefully examined, and it is shown how in their case all the functions of the State must take different forms. The advantages of the monarchical constitution are summed up; the right of resistance to the government, as well as the origin of revolutions are discussed; and he then passes on to the last section, which is entitled, Nations and States. States too, like the individual, have to be mutually complementary, since each one thus strengthens itself; and in them humanity takes an organic form. Accordingly, the movement of international

law passes from the state of constant war at the commencement of things, to that of everlasting peace in future ages. Cosmopolitan discoveries, private rights in international relations, the right of asylum, war, ambassadorial law, and diplomacy, are discussed; and as the goal, it is pointed out, that while the State has been the realization of the universal man in the individual form of the nation, humanity, apart from this limitation, will be one great moral man, and there will be no more waging of war, unless against those powers which are unspiritual or are below the spiritual stage.

Cf. H. Bonitz: Zur Erinnerung an F. A. Trendelenburg. Berlin, 1872.— E. Bratuscheck: Adolf Trendelenburg. Berlin, 1873.

9. However different, then, the elements might be which were found united in the men of whom this last section treats, and however great, accordingly, the differences were which were necessarily presented by the Metaphysics of George and the Logical Investigations of Trendelenburg, or by the Ethics of Rothe and Chalybaus respectively, still there was always this similarity between them, that the elements of their doctrines were originally speculation, and philosophy. A different state of things must naturally present itself when speculative doctrines are united, not with any such speculation or philosophy, but with a science, namely, the science of nature, whose watchword is: War against speculation. Nor do we see what was observable in the case of some of those just mentioned, who began in the later years of their lives, after their own philosophy had pretty much taken a complete form, to occupy themselves with the natural sciences, in order to borrow from them what supported their systems. On the contrary, we see here that the thorough, because professional, study of the natural sciences is not interrupted where the speculative impulse awakes, and we find that both equally largely contribute to the form taken by the system. There is something natural in passing from Trendelenburg to such men, because those philosophers to whom he owes most, were the ancient philosophers, i.e., those in whose case philosophy had not yet separated itself from the other sciences; so that even from the genesis of his system we can explain how, in the development of his philosophical views, he so often lays claim to the results of other sciences, such as those of grammar, mathematics, etc. Two men, now, are to be mentioned here, one

of whom is about the same age as Trendelenburg, and the other about half a generation younger, who by a course of study which, just because it presents a contrast, necessarily led to many results having points of contact, and by active scientific intercourse with the same representatives partly of philosophy and partly of science, have come to stand in a relation to each other which makes it difficult even for an attentive observer to decide whether the repulsion or the attraction between them is the greater. These are the two natives of Lausitz, Fechner and Lotze, who present a contrast to each other also in this, that the former will perhaps regard it as an insult when a sketch of the history of philosophy treats of him, while the other would have had to be very forbearing if, when Fichte gave him a place among the physiologists as contrasted with the philosophers, he had taken it calmly. Fichte, however, did not fail later to make an amende honorable.

10. Gustav Theodor Fechner was born on the 19th of April, 1801, in the neighbourhood of Muskau, and has been professor of physics in Leipsic since 1834. [Fechner died at Leipsic, Nov. 18th, 1887.—Ed.] He originally attempted to separate the two sides of his nature, that of the penetrating humorist and that of the keen observer, by actually publishing his wonderfully beautiful humorous things under the name of Dr. Mises, and his translations and repertories of physics and chemistry, on the other hand, under his own name. His proof of the theorem that space has more than three dimensions (in his Four Paradoxes) already showed the impossibility of making the separation; and this was shown still more by the Book of the Life after Death, mentioned above (§ 336, 3), which Dr. Mises had written. Accordingly, when, in the year 1861, Professor Fechner turned his attention to the series of works which develop in a gradual way his favourite theme, he gave the last-mentioned work a place among his serious writings; and when he brought out a second edition in 1866, he called himself Fechner on the title-page, just as, on the other hand, he wrote his Book of the Moon as Fechner, without disowning the Dr. Mises in it. A lingering trouble with his eyes, which condemned him to a life of total darkness, enabled him to direct his glance all the more to the inner life; and what he saw on his recovery, when he first came once more

into contact with nature in all her glory, became the germ of what he gave to the world in his Nanna; On the Psychical Life of Plants (Leipsic, 1848). But he had proved in the work, On the Highest Good (1846), published two years before, that it was not only nature which roused him to reflection. He published what was a further development of the thoughts presented in Nanna, in his Zend-Avesta, or On the Things of Heaven and the World Beyond (3 vols.. Leipsic, 1851). Some years after, his work, On the Physical and Philosophical Atomic Theory (Leipsic, 1855) appeared, and in the year following the controversial work, Professor Schleiden and the Moon (Leipsic, 1856), which is remarkable as much for the thoroughness with which the investigation is conducted as for the humour in it. After a pause of several years, during which time some extremely interesting papers by him appeared in the transactions of the Leipsic Gesellschaft der Wissenschaften, he issued his Elements of Psycho-Physics (2 vols., Leipsic, 1860). In his work, On the Question of the Soul (Leipsic, 1861), Fechner himself directs attention to the very close connection in which the Elements and the Atomic Theory stand to the thoughts developed in Nanna and the Zend-Avesta. This work is altogether the best fitted for enabling us to take a general view of Fechner's theory of the universe in its entirety and completeness; while in the other works, particularly at the beginning, we easily get the impression that only Dr. Mises worked at the Nanna, and only Professor Fechner at the Psycho-physics. What Fechner in the Zend-Avesta describes as observation of nature in contrast with investigation into nature, is in the Question of the Soul described as the true philosophy of nature; and he opposes this quite as much to materialism as to the philosophy which has hitherto held sway. The former resembles the man who denies that the circle has a centre, because, cut the periphery into as small fragments as you choose, you never find it amongst them. The latter, again, resembles those who, before they have found the centre, wish to construct the periphery out of it. In place of this, he seeks for the centre which belongs to the periphery, for the invisible which belongs to the visible; he speculates from facts, i.e., from what experience and calculation have established as certain; and he speculates from this, not beyond it. He first asserts that he makes no distinction between the words "soul" and "spirit." but

understands by both what manifests itself, and can therefore be characterized only by the phenomena of the self-manifestation; while frame or body is that which is grasped by means of the outward senses, and is characterized only by the relations of the external manifestation. He then takes his stand with Descartes on the truth that our own soul exists. as on the one incontrovertible fact. The conclusion drawn as to the existence of other human souls rests on analogy and supplies us with no real knowledge. It ought properly to be called faith. On the same grounds on which souls are attributed to other men, they are attributed also to animals by all with the exception of the Cartesians; and they must also be allowed to plants. It is conclusively shown that the reasons urged against this view are either reasonings in a circle or paralogisms. Fechner next more strictly formulates six positive reasons which were developed in Nanna, and arrives at the result that plants have undoubtedly no animal souls, because their souls consist only of sensation and impulse bound to the present, that the souls of animals have besides presentiment and after-feeling, together with memory and a power of representative association, while finally, the human soul possesses the higher consciousness of the past and the future. If the soul of the plant therefore occupies a lower position than the animal soul, still, looked at from another point of view, it constitutes a correlate to this, just as the woman does to the man; and to conceive of the life of the plant as an embryonic life, or life of sleep, is to do it injustice. The gradation rather is: bodies belonging to the inorganic kingdom, which are always and entirely asleep; bodies belonging to the organic kingdom, which are alternately asleep and awake (for the plant, too, opens its eyes when it blooms, only it always has new eyes), and in which plants show a permanent slumbering of the higher faculties, animals of the highest of all. God and his angels are eternally Just as we are under the necessity of supposing that souls exist in a world beneath that of man and animals, we must, exactly in the same way, suppose that souls exist in a world above it. Such are, to begin with, those souls whose body is constituted by the world-body with all that is in it, and therefore by the earth and our bodies included. The earth-soul or earth-spirit looks through the eyes of all men. That spirit is a self-conscious thought of the

greater spirit which we call humanity, spirit of humanity, or whatever you like. Just as our thoughts enter into conflict within us and become reconciled, so too do we within that greater spirit. It may be questioned whether a greater spirit, again, dwells within the single planetary systems, but it is established beyond doubt that just as our soul dwells throughout our body, the world in the same way is dwelt in throughout by God, whom therefore, according as we conceive of Him, we name the All, or the spirit of the All. (Just as the Nanna had taken as its theme the soul which is lower than the animal soul, the Zend-Avesta takes for its subject the superhuman souls, in connection with which the angels are identified with the spirits of the stars.) We have thus now reached the point at which Fechner's fundamental idea of things can be brought forward. This can be done only at this stage, for he impresses upon every one that the plunge into the dark gulf of a fundamental idea of the essence of things, is best undertaken only after we have exhausted the wealth of the phenomena manifested by this essence; since a fundamental idea of things may certainly be inferred, though nothing can be inferred from a fundamental idea. If we hold firmly to the thought that there is only one fact which is in accordance with experience, namely, consciousness,-this solitary existence which knows how it is, and is exactly as it knows,-and if we pass from this to what we are forced to assume the existence of by the three principles of belief, then undoubtedly it becomes possible to adopt the view which is cherished by materialism and the philosophers of the day, that besides what we possess of things in our consciousness, in sensation, knowledge, etc., there exists not only outside of our consciousness but outside of every consciousness a dark unknowable thing-in-itself, or, it may be, many such dark things, which by their effect upon or reciprocity with the soul give rise to consciousness. To this view, which Fechner compares to the man who, after he had thoroughly studied a steam-engine in all its parts, still wished to see the space in which the horses which drove it were to be found, he opposes the other and true view, according to which there is nothing but phenomena, i.e., what is found in consciousness. reason why this matter of consciousness presents a connected whole which is free from the arbitrariness of combination, and which thrusts itself upon every individual consciousness,

is, that they are all embraced by a higher consciousness, which unites them together by means of what they have in common and by their reciprocal relations. In this consciousness, we find, in addition to what comes into the individual consciousness, something else which is an external world, not indeed to the higher consciousness, but certainly to the other individual consciousnesses. What comes neither into a lower nor a higher consciousness, does not exist. That this view is idealism, Fechner is well aware; and so he very often blames the modern idealistic systems for not being idealistic By means of an idealism such as this which he works out, everything is not changed into a constantly shifting flux of dreams. Law is what represents the permanent element in phenomena, and what is essentially real in them. He who knows the laws of the combination and course of phenomena, knows all that the wisest man can know of the principles of existence. All questions relating to causality, with their Wherefore? must be answered by the statement: That is the law. Thus the law of phenomena is their real being; and in this sense, and because all the connected wholes of phenomena come into His consciousness which conditions them, we call God the Highest Being. Just as Fechner assumes to himself the name of an idealist, so also he assumes Phenomena, according to him, are divided that of a dualist. into two classes, of which the one is not reducible to the other. The one comprises everything which appears to itself, and therefore the phenomena of self, souls, and spirits. The other comprises what appears to others only, and therefore external phenomena, bodies, corporeal substances, etc. When materialism, which regards what we know of bodies as a secondary consequence of a thing-in-itself, namely matter, appeals to experience, it forgets that all we can prove in connection with what we call bodies, if we make experience the basis, is that there exists a collection of phenomena, which exists for different souls at the same time. The permanent matter which is got by abstraction from this combination of phenomena, is only an expression for a permanent possibility of the recurrence of external phenomena. We have no reason whatever for supposing that there exists more of the corporeal world than the combination of phenomena which is governed by laws, and which exists for more than one unity of consciousness at the same time. This does not at all prevent

us from likewise reducing to its primitive elements that combination which is governed by law, by going back analytically to the primitive elements of the body. If this is done, we finally reach the atom, which is thus as much the boundary conception when we go downward, as God, or the All, is when we go upwards. Fechner does not wish his atomism, --which is developed in his Atomic Theory,-to be confounded with monadology, with which, on the contrary, it engages in a life-and-death struggle. His atoms are just the simplest phenomena, and therefore what exists in consciousness, i.e., in the consciousness of God, and thus of all; while, on the other hand, the monads of Herbart and Lotze are dark things-in-themselves. Physical reasons, to begin with, necessitate the assumption of atoms, since it is possible to construct the undulation theory upon which optics, the theory of heat, etc., are based, only on the hypothesis of discrete particles separated from each other by empty space. Then we have the fact, that the phenomena of isomerism, the actual refutation which has been given of Mariotte's law by means of the discovery of a limited atmosphere, etc., can be explained only by these particles. It is besides quite false to assert that the teleological way of looking at things is incompatible with the atomistic view. (Fechner produces himself as a proof to the contrary.) The imponderable ether which exists between the discrete parts of the ponderable matter, consists likewise therefore of discrete parts, and these atoms stand in relation to each other by means of forces, just as the celestial bodies do, i.e., they obey the laws of equilibrium and motion. Combinations of atoms produce molecules, which may be again disintegrated, or which are destructible. The remoteness of the primitive atoms of whose possible dimension and form nothing is known, is to be thought of as relatively very great. No one has as yet succeeded in tracing back the repulsion and attraction of atoms to their primitive forms. Since matter itself is nothing but force, i.e. law, the atoms would be centres of force. After this physical exposition, Fechner passes on to philosophical explanations, i.e., he goes on to show how, on the hypothesis of atoms, a philosophical view of nature, or a real Metaphysic, is possible. In other words, he explains how it is possible to grasp the most universal conceptions of what is given in experience and those conceptions which bound experience, by advancing further

and coming to conclusions on the basis of experience itself, until we reach the most universal and final principles of experience. We have now to think of the atoms, first as having only position but not extension, as real points which are found as the absolutely discontinuous in the absolutely continuous, namely, space and time, so that they present us with the three main conceptions of quantity, viz., nothing, unity, infinitude, or have for their schema, central point, radius, and periphery. By means of the absolute forms time and space, pure matter (the many atoms) gets relative forms. To suppose the existence of matter already formed, as, for instance, balls, in order from this to construct the world, is to build a house out of houses. From space, time, their motions, the relations between them, and the laws which govern them, all that can be constructed in the domain of nature, may be constructed. In addition to an explanation of his position in reference to the doctrines of Herbart, and a critical discussion in the appendix on space, time, and motion, which seems meant to refer to Trendelenburg, the book closes with an hypothesis in regard to the universal law of force in nature, in which the law of gravitation is described as but an imperfect manifestation of a more universal law. Since this law contains in itself a graduated sequence of laws, in which the result of the higher laws, instead of being regarded as a combination of the results of the lower, itself combines itself with the results of the lower laws, it becomes possible by means of it to explain the phenomena of elasticity, crystallization, units of measurement, simple chemical elements, aggregate conditions, and finally, the distinction between imponderables and ponderables, in such a way that in the former it is found to be atoms which enter into combination, and in the latter molecules. The final form of Fechner's views is not, however, represented by the dualism which, according to his own statement, is constituted by his doctrine of soul and body, and which enables him to jeer at the materialists who want to deduce consciousness from what is corporeal, which certainly they must find it easy to do, since, to start with, they have turned what were simply determinations of consciousness, such as sensations, etc., into things-in-themselves. Since, so far as experience goes, every soul has united with it a body, which has been formed in view of external manifestation,-or. to put it otherwise, since the possibility of a combination of VOL. III.

manifestations perceived by self is connected with the possibility of a combination of manifestations perceived by others, so that they form a solidarity and constitute one substance, i.e., are mutually conditioned,—the law of this solidarity must also be sought after; and this is the task of the Psycho-Physics, the elements of which are given in his two-volume work. Fechner says that his theory is materialistic, just because it recognises this fact of two things mutually conditioned; and that indeed it is more than ordinarily materialistic, because it maintains not only that no human thought is possible without a brain, but also that no Divine thought is possible without a world and movements. It may, however, be equally called a system of identity, because, according to it, both manifestations point to one substance, i.e., to a substance conditioned in accordance with law, while their inseparability is finally conditioned by the unity of the Divine consciousness. Fechner says that his view stands in a relation of complete antagonism to one view only, namely, monadology. Throughout the whole of the Psycho-Physics it is taken for granted that the bodily and psychical processes stand to each other in a functional relation. The psychical processes are indirectly conditioned by influences exercised upon the body, and immediately by such as are exercised within the body; and these latter processes are the peculiarly psycho-physical pro-In the External Psycho-Physics the possibility of having a psycho-physical standard is discussed; and then the law discovered by Weber,—that we have a like increase in sensation corresponding, not to a like, but certainly to a relatively like, increase of stimulus, - is taken as a starting-point, in order,—after the methods have been discussed according to which differences of sensation are measured,—to discover within what limits the law holds good. With a view to this, the experiments made by Weber with the organs of touch only, are extended to the sensations of light and sound; and in particular, the point is more strictly defined at which we begin to notice a stimulus or a difference in stimulus, and this is called by Fechner the threshold. An attempt is further made to establish mathematically the value of the threshold in the various departments of sense. The following law is next laid down as a parallel one to Weber's law: When the susceptibility for two stimuli changes in a constant ratio, the sensation of their difference remains the same.

compared to the experiments which have been made in connection with exercise and fatigue. Finally, those influences are treated of which come into operation when we have a mixture of stimuli, as for instance, of white with coloured light, etc. The Internal Psycho-Physics, which Fechner gives us in the second half of the second volume, treat of psychophysical processes in the proper sense of the term,—which were passed over by the External Psycho-Physics, since the latter went from the physical stimulus directly to the psychical sensation-those processes, that is to say, which go on in the subject, or in the immediate substratum of what is physical. Here the most interesting point is the seat of the soul. First of all, in the wider sense, since the soul is the uniting bond of the whole body, the body itself is this seat. In the narrower sense, it is the organ with which are connected the manifestations of active conscious life; and Fechner does not wish this organ to be conceived of as a point, but as extended, so that in healthy conditions the soul spreads itself through brain, spinal cord, and nerves. It is then stated as in the highest degree probable, that Weber's law, the parallel law, and the law of the threshold will hold good in a much more unconditional way when we come to discuss the relation between psycho-physical excitation and sensation, than in connection with the relation between stimulus and psychical process. The fact of the threshold is in particular of the highest importance for the theory of unconscious ideas, sleep, attention, A large number of experiences in connection with images in memory and imitations of images in memory, hallucinations, etc., are collected together; and he sums up, in some general observations, the main conclusions which can The hypothesis of a special nervebe drawn from them. ether as the substratum of psycho-physical movements is considered by Fechner to be unnecessary. The imponderables certainly play a rôle in connection with these movements, but so too do the ponderable substances. Most interesting and instructive is the attempt, made by Fechner, in the work entitled The Three Motives and Grounds of Belief (Leips., 1863), to show how his standpoint satisfies the highest interests of the emotional side of man's nature, since "it takes the most important utterances of the Bible in a more literal sense than the literalist, and in a more rational sense than the rationalist, and finally elevates the grounds of unbelief into

grounds of belief." After faith has been defined in general as the holding for true what we cannot be certain of by experience, or by logical, i.e. mathematical, reasoning, the question is limited to faith in the narrower sense, i.e. to faith in the highest things, God, the other world, higher spiritual existences. The determining grounds of faith are divided into motives which force us to believe, and reasons which justify faith, while the union of the two is called principles of faith. Of these there are three sorts. In the first place we have historical principles, since we believe what has been believed before us and is believed round about us. When in the most different circumstances the highest endowed spiritually and the best morally, maintain the truth of a tradition, then we have a weighty reason for holding this to be true. Secondly, practical motives force us to believe; we believe what it is profitable for us to believe, or what tends to our welfare. At any rate, those who are always asserting that there is nothing which is so profitable to man as truth, ought not to object if a man goes on the supposition that what is of the highest service to him cannot be false. As these two motives mutually support each other, so also does the third, or theoretical motive, according to which we believe what we find, in experience and reason, determining grounds for believing. The section in which the theoretical principle is discussed, and which is the most important in the whole work, is closely connected with the proposition to which Fechner gave expression in his earlier works, namely, that we have, to begin with, a real knowledge only of our own individual self. Starting from this fact, we can go on to draw inferences, not by means of induction, for many facts are necessary if we employ this, but according to analogy. If these conclusions are kept within the limits laid down by science and analogy, and if they are supported by the historical and practical argument, then they are grounds of belief which are valid for reason. The fact that I know myself, or am spirit, permits me to conclude not only that there are other (neighbouring) souls, but that there is a spirit which embraces me and the other spirits—a spirit in which we live and move and have our being, just as our perceptions, recollections, and thoughts do in our own spirit. As in our case, when perceptions have become recollections, the reaction of the latter on the former proves that the change was in no sense de-