# 12 (20 April 1871) 276

#### NOTES

Attributed to Peirce by Fisch in *First Supplement* (internal evidence). This notice is unassigned in Haskell's *Index to* The Nation, vol. 1. Peirce met De Morgan in 1870.

-We need not apologize for adding to the sketch we gave last week of the late Professor De Morgan a few remarks of a more critical nature. Among mathe maticians he was distinguished more for the completeness of his logic than for analytical facility. His pupils speak of him with warm admiration, but it may be presumed that they gained from him even more of general skill in accurate reasoning than of specific mathematical power. His elementary books, which are not enough known, are excellent, especially for students/who have no natural turn for mathematics; and his work on the calculus is unusually complete, and its demonstrations particularly instructive. Of his researches, one of the most noticeable is his paper on triple algebra, which traces out the consequences of certain definitions of symbols in a manner much like that of his formal logic; but for this difficult subject De Morgan's analysis was not sufficiently subtle and he can only be said to have started the enquiry without having arrived at any valuable results. His best contributions were to mathematical logic. In his controversy with Sir William Hamilton, in 1847, both disputants fought in the dark, because Hamilton's system had never been published, and Hamilton had never patiently examined De Morgan's. All the points of Hamilton's attack were, however, completely disproved. Upon the publication of Hamilton's works, De Morgan renewed the controversy with Mr. Spencer Baynes, who, after an unconditional pledge to produce proof of his position, was compelled to abandon the field. Since that time Hamilton's once celebrated system has fallen into neglect, while De Morgan's commands more and more respect. In point of fact, Hamilton's system, like De Morgan's, is mathematical, but is the work of a mind devoid of mathematical training. It would be premature to try to say what the final judgment of De Morgan's system will be, but it may at least be confidently predicted that the logic of relatives, which he was the first to investigate extensively, will eventually be recognized as a part of logic. The best statement of De Morgan's system is contained in his "Syllabus of a Proposed System of Logic," but his fourth and fifth papers on the syllogism are of later date. De Morgan was a deep student of the history of the sciences to which he was devoted. He wrote many biographical notices of mathematicians in the "Penny Cyclopædia," and the "English Cyclopædia," as well as a bibliography of arithmetic. Indeed, the amount of his writing upon various subjects in the two cyclopædias, in the Athenæum, in the Companion to the British Almanac, in seventeen or more separate books, and in various scientific periodicals, including the Journal of the Philological Society, is enormous, and it is all very pleasant reading for its perspicacity, vigor of thought, wit, and a certain peculiar flavor of style. The last qualities are well seen in his "Budget of Paradoxes," published in the Athenæum.

# 13 (2 November 1871) 294

## NOTES

This is probably by Chauncey Wright, inasmuch as the comments on Peirce's review of Fraser's *Berkeley*—see 13 (30 November 1871) 355-356—are by Wright, according to Haskell in *Index to* The Nation.

There are six critical notices this month, and they compare favorably; for weight and learning, with the rest of the number, which, taken altogether, is a very good one, with nothing bad in it, and much that is very good, and having, indeed, no fault except the good-sized fault, that it is deficient, almost to destitution, in purely literary matter, and that, for a "Review," it notices not many books. Those which it does notice, however, it treats with all the customary care. They are these: Delbruck's "Uses of the Conjunctive and Optative in Sanskrit and Greek"; Dr. J. F. Clarke's "Ten Great Religions of the World"; the sixth edition of Professor Max Müller's "Lectures on the Science of Language"; the second and third volumes of Greene's "Life of Major-General Nathanael Greene"; Professor A. C. Fraser's edition of "Berkeley's Works"; and the "Battle of Dorking" to the remarks upon which we have already referred. The initials "C.S.P." are appended to the review of Berkeley, and, doubtless, they stand for Mr. Charles S. Peirce, who, it is probable, has of all men paid most attention to the subject which he handles in this essay. It is much more than a mere notice of Mr. Fraser's volumes, and we must reserve till next week what we have to say about it.

## ·13 (30 November 1871) 355-356

#### **NOTES**

Chauncey Wright, identification: Haskell, Index to The Nation, vol. 2.

Chauncey Wright (1830-1875) was graduated from Harvard College in 1852. He was known primarily as a philosopher, having contributed several important essays in that subject to the North American Review. In addition to working in philosophy, he made contributions to mathematics and biology, his essays in defense of the evolution of species being reprinted in England at Darwin's insistence. He became a regular member of the Harvard faculty in 1874, where he taught for one year until his untimely death.

—Mr. Charles S. Peirce, in his review of Berkeley in the last North American, to which we promised to return, takes the occasion to trace out in the history of philosophical thought in Great Britain the sources of Berkeley's doctrines and of later developments in English philosophy. These he traces back to the famous disputes of the later schoolmen on the question of realism and nominalism—that question on which each new-fledged masculine intellect likes to try its powers of disputation. But the motive of the schoolmen who started this question or gave it prominence, was not in any sense egotistical, however pugilistic it may have been, but was profoundly religious—more religious, in fact, than anything modern, and, perhaps, more fitly to be compared to the devotion that produced the Gothic architecture than to anything else. The most remarkable thing in the essay is Mr. Peirce's interpretation of the actual question so earnestly agitated.

This, it should seem, is not at all what has become the universally accepted account of this voluminous dispute—an account derived, it appears, from Bayle's Dictionary. The realistic schoolmen were not such dolts as to contend for an incognizable reality beyond any powers we have for apprehending it, nor for the existence of universals as the objects of general conceptions existing outside of the mind. They only contended (against the sceptical or nominalistic tendency) that reality, or the truth of things, depends on something besides the actual courses of experience in individual minds, or is independent of differences and accidents in these; and that truth is not determined by the conventions of language, or by what men choose to mean by their words. So far from being the reality commonly supposed—that is to say, the vivid, actual, present contact with things—the reality of the realists'was the final upshot of experience, the general agreement in all experience, as far removed as possible from any particular body's sight; or hearing, or touch, or from the accidents which are inseparable from these. Yet it is essentially intelligible, and, in fact, is the very most intelligible, and is quite independent of conventions in language. The faith of the realists (for theirs was a philosophy of faith) was that this result of all men's experience would contain agreements not dependent on the laws and usages of language, but on truths which determine these laws, and usages. Modern science affords ample evidence of the justness of this position.

-That this truly was the position of the realistic schoolmen, Mr. Peirce contends; and he bases his opinion and belief on an original examination of their works, such as has not, we venture to say, been undertaken, outside of Germany, for a very long time. In spite of the confirmation of this position which modern science gives, the course of the development of modern science has, nevertheless, as Mr. Peirce points out, been closely associated with the opposite doctrinenominalism, the representative of the sceptical spirit. This appears in Berkeley's philosophy, who is a nominalist, notwithstanding his penchant for Platonic ideas or spiritual archetypes. Hume, a complete representative of the nominalistic and sceptical spirit, is an historical product of Berkeley's nominalism; and, though commonly regarded as the author of modern philosophical movements, was not, historically considered, so different from Berkeley but that Mr. Peirce regards the latter as entitled to "a far more important place in the history of philosophy than has usually been assigned to him." So far as Berkeley was a link in the chain this is undoubtedly true. So far as Hume (in common with all independent thinkers of the sceptical type) was not such a link, he was, we think, a startingpoint in the movement of thought which has resulted in English empiricism, or the so-called "Positivism" of modern science, which Mr. Peirce seems inclined to attribute to a regular development of philosophical thought. Scepticism, though perhaps never original, as we are taught by orthodoxy, and only a revival of old and the oft-exploded errors, is, nevertheless, by its criticism, the source of most of the impulses which the spirit of inquiry has received in the history of philosophy. The results of modern science, the establishment of a great body of undisputed truths, the questions settled beyond debate, may be testimony in favor of the realistic schoolmen; but this settlement was the work, so far as it depended on

the impulse of philosophy, of the nominalistic or sceptical tendencies of modern thought, which has put itself in opposition, not to the faith of the realists, as Mr. Peirce understands them, but to their conservatism and dogmatism, to their desire to agree with authority-that admirable devotion of theirs. It is curious that these things, the most certain of all on which the actual arts of life are now dependent, should be the results equally of the faith of the realists and the sceptical inquiries of the nominalists. But this is enough to account for the gratitude and the indifference which we owe to both of them, especially as the confirmation which science has afforded is not of the sort which the realists anticipated. It is the empirical conjectures of the visionary, not the inspired teachings of the wise, that have established realities for themselves and for truth in general. There are many other curious points of history and criticism in this article which will engage the scrutiny of the student of metaphysics, and doubtless afford him great delight. We are afraid to recommend it to other readers, as Mr. Peirce's style reflects the difficulties of the subject, and is better adapted for persons who have mastered these than for such as would rather avoid them.

## 13 (14 December 1871) 386

MR. PEIRCE AND THE REALISTS

To THE EDITOR OF THE NATION:

SIR: In your far too flattering notice of my remarks upon mediaval realism and nominalism, you have attributed to me a degree of originality which is not my due. The common view that realism is a modified Platonism has already been condemned by the most thorough students, such as Prantl and Morin. The realists certainly held (as I have said) that universals really exist in external things. The only feature of the controversy which has appeared to me to need more emphasis than has hitherto been put upon it is that each party had its own peculiar ideas of what it is that is real, the realists assuming that reality belongs to what is present to us in true knowledge of any sort, the nominalists assuming that the absolutely external causes of perception are the only realities. This point of disagreement was never argued out, for the reason that the mental horizon of each party was too limited for it to comprehend what the conception of the other side was. It is a similar narrowness of thought which makes it so hard for many persons to understand one side or the other, at this day.

C. S. Peirce.

WASHINGTON, D. C., Dec. 10, 1871.