who are expected to devote a good fraction of their time to athletics and fraternity interests can not carry such courses, but we are far from believing that the present tendency in these matters in some of our schools is a desirable one or one which may be expected to persist.

The writers of many of the replies received by us seem to assume that the proposed preliminary science course is the work of medical practitioners who have devoted but little time to the study of working conditions, and further that the courses involve difficult or advanced scientific studies. Both notions are absurdly wrong and it is evident that the presidents of a few of the colleges are not very familiar with the work of our active medical men on the one hand, or with elementary scientific studies on the other. It may be added that the members of our committee are not practitioners of medicine, but we have drawn many valuable suggestions from practitioners as well as from teachers.

This work may call for more than one year's time from many students who attempt it, we admit, but that it is really more than can be accomplished in one year is not to be admitted yet. Any one who is familiar with science teaching will recognize that we have here merely the elements of such work, and it is a fact well known to many of us who have dealt with medical students for a number of years that some of the state universities actually give such courses, and successfully, to freshman students.

Our committee has been accused of advocating a departure from an "ideal" course. We have admitted all the time that the scheme is not perfect, but we are concerned with the practical question of what we can get, rather than with what we should like to have. I firmly believe that the difficulty is not so much with our proposed course as with the ideas which obtain in some quarters as to what is a fair amount of work for a young freshman who has completed four years of study in a good high school. I believe that with such a training honestly completed our schedule may be carried through in another year of college work. With this as a beginning, possibly in time a second year may be added to the requirement.

But the point of importance is the amount of work and not the name. The Council on Medical Education has spoken of it as a *preliminary year,* but if it actually calls for more than that time the student should be required to spend it, since it seems that little short of this would answer as a preparation for modern medicine. That the applicant for entrance to the medical school has this minimum amount of knowledge should be determined through the examinations of an independent board, and not through the professional school, or by certificate of the college or preparatory school. We all know what such entrance examinations amount to, and an important step forward will be taken when the right to enter upon the study of medicine, as well as the right to practise is passed upon by authorities other than the college faculties. The standard in such entrance examinations should be made as uniform as possible for the whole country, and to aid in bringing about such a desirable situation is one of the objects of the present movement.

J. H. Long

SCIENTIFIC BOOKS

Pragmatism, a New Name for Some Old Ways of Thinking: Popular Lectures on Philosophy. By William James. New York, Longmans, Green, and Co. 1907. Pp. xiii + 310.

Tron de l'air! as I used to hear the Gascons of the *Quartier* exclaim, long ere I knew of

"toughs" and "tender-feet," of "Cripple-Creekers" and "Bostonians" in philosophy (p. 12 f.). The picturesque phrase springs to my lips again, set agog by the refreshing spectacle of a "big pot," as the English say, courageous and independent enough to avow himself an anarchist in things speculative (p. 28 f.). For Professor James bethumps the high priests, sacred and profane, of contemporary philosophy, with a kind of holy joy. And, so far as my limited observation goes, this joy is a pronounced and sprightly characteristic of "the oddly-named thing pragmatism" (p. 33). In a word, pragmatism has been misunderstood (p. 197), even made a mockery and jest (p. 233), as Mr. James alleges, because, to this point, it excels in the negative *nuance*.

Accordingly, I for one welcome this authoritative addition to the pragmatic canon if, peradventure, it may serve to unravel certain excusable puzzledoms. So, to begin with, What is pragmatism? Professor James directs the second of his lectures to this set question, with the following results:

> The pragmatic method is primarily a method of settling metaphysical disputes that otherwise might be interminable. . . . The pragmatic method in such cases is to try to interpret each notion by tracing its respective practical consequences (p. 45). Theories thus become instruments, not answers to enigmas, in which we can rest (p. 53). The attitude of looking away from first things, principles, "categories," supposed necessities; and of looking towards last things, fruits, consequences, facts (p. 54). Ideas (which themselves are but parts of our experience) become true just in so far as they help us to get into satisfactory relation with other parts of our experience (p. 58). Truth is *one species of good*, and not, as is usually supposed, a category distinct from good, and coordinate with it. The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite, assignable reasons (pp. 75–6).

Later, our anarchist, wishing doubtless to conserve his reputation, commits himself thus:

> Pragmatism, pending the final empirical ascertainment of just what the balance of union and disunion among things may be, must obviously range herself upon the pluralistic side (p. 161). Common sense is *better* for one sphere of life, science for another, philosophical criticism for a third; but whether either be *truer* absolutely, Heaven only knows (p. 190). The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity *is* in fact an event, a process (p. 201). "The true," to put it very briefly, is only the expedient in the way of our thinking, just as "the right" is only the expedient in the way of our behaving (p. 222).

Although, more than likely, I can not see these fluid matters from the pragmatic angle, "the pragmatic movement, so-called," which "seems to have rather suddenly precipitated itself out of the air" (p. vii), appears, *more Jacobo,* to embody a perfectly definite tendency. The "Anglo-Hegelian school" (p. 17) which has dominated the British universities for a generation, and energized mightily in certain American institutions, begins to pay the penalty of success and sacrosanctity. The bedewed gospel of the first generation has been overlaid by crystallizing commentary in the second. Hence, unmoved by the earlier enthusiasms and unaffected by their ramified causes, contemporary critics can stand forth unabashed and say of the "personal faith that warms the heart of the hearer" (p. 279): "It is far too intellectualistic" (p. 70); for it "truth means essentially an inert static relation" (p. 200); it rests "in principles after this stagnant intellectual fashion" (p. 95); "the theory of the Absolute, in particular, has had to be an article of faith, affirmed dogmatically and exclusively" (p. 159); "for rationalism reality is ready-made and complete from all eternity, while for pragmatism it is still in the making, and awaits part of its complexion from the future" (p. 257). On the whole, then, pragmatism betokens a protestant attitude towards such catholic tendencies and formulations of the orthodox university philosophy of the hour. In this respect, as Mr. James recognizes aptly on his title-page, it is nothing but "a new name for some old ways of thinking." To fine, the point, it is the familiar reaction of nominalism against standardization of experience according to archetypes "laid up in heaven." Never-

theless, it must not be confounded with its medieval, or even its British (Locke, Berkeley, Hume, Mill) forerunners; it does possess originality, just because it springs from present stress. The "new" astronomy, physics and chemistry, the sciences of life, above all, the amazing exfoliation of the human sciences, particularly psychology, forbid us to rest in Hegel, or even in "hegelisms" (a horrid word, Mr. James!) resurrected at Oxford after forty years and tricked out in the King's English. Pragmatism has the courage, the temerity, the "cheek," the "gall," the folly—call it what you like, to stand up and say "no." Meanwhile, the elementary condition of its logic, the vacuity (intentional, as some allege) of its metaphysics, and its besetting sin, confusion of psychological with epistemological problems, prevent it from settling down into any such sediment as might be labelled *universalia post rem*. Briefly, the pragmatic "things," which preexist principles and genera and species, are not "tea-trays in the sky," or even "black cows in the night," but rather palpitating human individuals gurgling along their several, and peculiarly private, psychological "streams." Pragmatism presents no commission to exalt objects at the expense of "universes," but it exhibits touching faith in persons as opposed to presumed spiritual unities that catch them up and carry them off willy-nilly. Here its "humanism" centers, and here its significance as a centrifugal force in current thought pivots. "Rationalism sticks to logic and the empyrean. Empiricism sticks to the external senses. Pragmatism is willing to take anything, to follow either logic or the senses and to count the humblest and most personal experiences. She will count mystical experiences if they have any practical consequences. She will take a God who lives in the very dirt of private fact—if that should seem a likely place to find him" (p. 80). Therefore, I would urge, let us listen to the new message, let us keep the ring in order that it may have free play to come to clear self-consciousness (cf. p. vii). Yet, let us feel free to put questions, especially very elementary questions. Mayhap pragmatism can open up a world of what it calls "the real," possibly it can bring us down from the dizzy realm of ideas and force us to revalue what it terms "the concrete phases of existence." But, at least, it must afford us every chance to ask what all this may be and purport. For, as the "rationalist" would quote,

> I lived with visions for my company
> Instead of men and women years ago,
> And found them gentle mates, nor thought to know
> A sweeter music than they played to me.

And visions come to all schools.

Thus, I rub my eyes when I read this: "When old truth grows, then, by new truth's addition, it is for subjective reasons. We are in the process and obey the reasons" (p. 63); and I inquire: How distinguish between "old" and "new" without something "purely retrospective" (p. 102) in which both share equally? What are these "subjective reasons" if there be no universe basal to subjective and objective alike—where do you catch the characterization? What is "the process" as distinguished from "we," and what the "reasons"? How do we get at either, if they have not "been already *faked*" (p. 249)? Once more: "The finally victorious way of looking at things will be the most completely *impressive* way to the normal run of minds" (p. 38). Very likely. But, what is "the normal run" as differentiated from the "minds"? If you *can* lay hold upon it, what becomes of your "noetic pluralism" (p. 166)? It won't do to run off airily on the declaration "that all things exist in minds and not singly" (p. 208); for the *why* of the relation between "kinds" (which are not singles) and singles (which are never effective components of experience save in "kinds") is precisely the great problem of speculative thought. Again, Professor James writes, with admirable truth, "in every genuine metaphysical debate some practical issue, however conjectural and remote, is involved" (p. 100). But, then, if "we break the flux of the sensible reality into things . . . at our will" . . . if "we create the subjects of our true as well as of our false propositions" (p. 254), how are we to dis-

tinguish the "metaphysical" from the "practical"? Further, "I myself believe that the evidence for God lies primarily in inner personal experiences" (p. 109). What does this imply exactly? What are we forced to conclude as involved in the very possibility of the statement? It is all very well to hold that "the 'Absolute' with his one purpose is not the man-like God of common people" (p. 143); the problem remains, clamant as always. Where does the commonalty of this God find root? Meseems Mr. James himself can furnish forth reply: "The whole *naif* conception of thing gets superseded, and a thing's name is interpreted as denoting only the law or *Regal der Verbindung* by which certain of our sensations habitually succeed or coexist" (pp. 185–6). And, if so, is Mr. James not making common cause with the much derided "rationalists"? They, indeed, may have sacrificed "facts" to "principles," but pragmatists may all too easily sacrifice "principles" to "facts." And, after all, the traffic of philosophy is over the kind of universe in which it *has* so eventuated that facts and principles both disappear when separated. To appeal to the pragmatic method—if too much "ism" be bad for Green, it is equally bad for Mr. James. Thus the large riddle remains, Why are men always cozened by "isms"? Mr. James has not escaped the fate of more ordinary mortals. He writes sometimes like a gospeller; he would be a mediator; and when the gospel shall have been formulated, we shall know what pragmatism may import and where it proposes to take final stand.

Despite his humorous anarchism, Professor James has won to responsibility, and a book from his pen counts as an event. I am therefore bound to record the opinion that the present volume fails to rise to the level of its author's reputation. There is something too much of "the large loose way" (p. 215) about it. Of course, pages are illuminated by flashes from the psychologist whom we know and in whom we rejoice. Speaking of Leibnitz, he says: "What he gives us is a cold literary exercise, whose cheerful substance even hell-fire does not warm" (p. 27); he offers this really delicious etching of Spencer: "His dry schoolmaster temperament, the hurdy-gurdy monotony of him, his preference for cheap makeshifts in argument, his lack of education even in mechanical principles, and in general the vagueness of all his fundamental ideas, his whole system wooden, as if knocked together out of cracked hemlock boards" (p. 39); while these declarations remind one of many passages in the *Principles:* "The rationalist mind, radically taken, is of a doctrinaire and authoritative complexion: the phrase '*must* be' is ever on its lips. The bellyband of its universe must be tight. A radical pragmatist, on the other hand, is a happy-go-lucky anarchistic sort of creature. If he had to live in a tub like Diogenes he wouldn't mind at all if the hoops were loose and the staves let in the sun" (pp. 259–60). On the other hand, some cheap stuff, which one hates to see, has been allowed to creep in. Here is one of its mannerisms: "Pragmatism is uncomfortable away from facts. Rationalism is comfortable only in the presence of abstractions" (p. 67); "The more absolutistic philosophers dwell on so high a level of abstraction that they never try to come down" (p. 19); "the philosophy of such men as Green . . . is pantheistic" (p. 17). Here is another, and very different: "The actual world, instead of being complete 'eternally,' as the monists assure us, may be eternally incomplete, and at all times subject to addition or liable to loss" (p. 166); and here is a third, like unto the second: "Talk of logic and necessity and categories and the absolute and the contents of the whole philosophical machine-shop as you will, the only *real* reason I can think of why anything should ever come is that *some one wishes it to be here*" (pp. 288–9). To pirouette, even in a half-conscious way, between the substantive and transitive, the static and dynamic, the universal and particular, the one and many, may be a good "stunt" in a popular lecture-course, but one does not care to have Professor James stereotyped in this attitude. "Between the coercions of the sensible order and those of the ideal order, our mind is thus wedged tightly" (p. 211). Very true, very likely. But here

we are confronted with problems, and to suppose the statement fraught with solutions is to pay ourselves with words. In this very connection, the worst foes of pragmatism may be of its own household. The arrant rubbish now being piled up by certain pedagogical *chiffonniers,* for example, may prove far more fatal than all the flouts of the "genuine Kantianer" (p. 249). To the collectors of this stuff one can only exclaim with Touchstone, "truly, thou art damned, like an ill-roasted egg all on one side."

It surprises me, too, to see that Professor James exhibits some *naïevté* in his attitude towards the "rationalistic" school. "In influential quarters Mr. Schiller, in particular, has been treated like an impudent schoolboy who deserves a spanking" (pp. 66–7). Mr. James seems to have forgotten his previous remark: "No one can live an hour without both facts and principles, so it is a difference rather of emphasis; yet it breeds antipathies of the most pungent character" (p. 9). He can hardly be oblivious of the fact that a regnant intellectual or theological (ay, and scientific) group will stick at nothing to compass its ends. When its inner history—the pragmatic account of its persons—comes to be written, outsiders will be startled and disgusted to learn that the high-toned gospel of "self-realization" has been advanced by very common and very human methods. Innuendo, calumny, intrigue and even worse have played their several parts, while such persecution as the modern world permits has had free course. I am vexed to see that Mr. James has not learned to treat all this with the contempt it deserves, and has not preserved his charming humor to the extent of observing that it is as natural to man to "idealize himself into dirt" as into heaven. And this is the more to be regretted that British thinkers rather than American have been the marks for this refined mud-slinging.

Let me add, in conclusion, that pragmatism, as here outlined, may or may not be excellent science. Readers of Science must judge for themselves; those of them who are addicted to the fallacy of reification will find it a good cathartic. It is only raw material for philosophy. And, as I indicated above, I hope that, undeterred by pontifical anathemas, Professor James and his allies will proceed to *articulate* the philosophy which they believe themselves to possess. In any event, they are entitled to the satisfaction of knowing that, more than other contemporary groups, they contrive to keep the philosophical stream in sweetening motion. But whither it still remains for them to tell. So far as it has received voice, then, pragmatism is an avowed compromise. It is not beatified into a complete creation, attained and to be maintained. On the contrary, it rests a method of approach to thinking, especially from one incidental side. Whether it can overcome age-long antagonisms time alone will tell. In any case, it represents a real attempt at accommodation—a stage which, in the nature of the case, will pass away ere many moons. And then? Why, then, friend and foe alike will proceed to the *Bearbeitung der Begriffe,* a task rejected by these Lowell Lectures in rather cavalier style.

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Catalogue of the Crosby Brown Collection of Musical Instruments of all Nations. III. Part I., Africa. New York. The Metropolitan Museum of Art. 1907. Pp. xxii + 79; pl. 26.

This is a new volume continuing the series of catalogues of this fine collection, to which there have been various references in Science from time to time. Gallery 37 is devoted to the "instruments of savage tribes and semi-civilized peoples"; those from Oceanica and America will be dealt with in future volumes; the present one relates wholly to Africa. The "Egyptian type case" shows that most types of African and even European instruments were well developed thousands of years ago. The plates show a great variety of harps, lyres and lutes, as well as many forms of the curious Negro *Zauze,* sometimes misleadingly called "nail-fiddle" although the metal tongues are plucked, not bowed. (It is to be hoped that in a later edition the incorrect name