

SCIENCE.

FRIDAY, APRIL 16, 1886.

COMMENT AND CRITICISM.

AN ADDITIONAL ARGUMENT for the preservation and care of the levees of the lower Mississippi is afforded in an unexpected way. For many years great damage to stock, and human discomfort, in those regions, have been caused by small flies known as 'buffalo gnats' (*Simulium*). Very similar flies, with similar injurious habits, have long been well known in the valley of the Danube and elsewhere; but as the species that have been studied, breed, as a rule, in streams that are clear, rapid, and rocky, it has been a question of considerable importance how the insects bred in such great quantities in the low alluvial Mississippi country, — a question whose solution might, it was hoped, afford a means of checking the increase of the pest. The present spring Dr. Riley, and two of his assistants, Mr. F. M. Webster and Mr. Otto Lugger, have succeeded in determining the habits of the two known species; and it appears that they breed in the more swiftly running portions of the smaller creeks and bayous, which are permanent, and do not dry up in midsummer. They are found attached to the masses of driftwood and leaves, which form at points, and which, by impeding the streams below, form a more rapid current at the surface. The larvae and pupae have been absolutely connected with their respective adults, and a careful study of the general character of the breeding-places already indicates that the increase of the pests of late years is indirectly due to the crevasses in the levees.

DR. SHUFELDT, in a recent pamphlet published by the U. S. bureau of education, calls attention to the needs and shortcomings of anatomical museums in this country, and presents an outline of how such museums should be formed and conducted. The subject is of no little importance, from the fact that we have so few anatomical museums that serve as useful means of instruction, or indeed for any thing except as repositories of anatomical odds and ends and curiosities, of which medical students, as a rule, make no use.

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One cause of this condition is the general indifference or neglect of comparative anatomy in medical instruction, and the non-recognition of the principle that museums, to be educational, should be largely comparative. The author rightly insists upon greater attention being given to comparative morphology as a basis of medical progress, and censures the lack of system. We are glad also to see his protest against the misleading and expensive dried preparations so common in collections.

BY THE ADDRESS of President Adams before the Cornell alumni at their sixth annual dinner recently held in New York, the controversy over what shall be the character of the university work was revived. Cornell was one of the colleges established through the benefit of the Morrill grant of 1862. The fundamental intent of that grant was the endowment in each state of at least one college where the leading object should be, "without excluding scientific and classical studies, to teach such branches of learning as are related to agriculture and the mechanical arts, in order to promote the liberal and practical education of the industrial classes." The grant to New York consisted of land scrip for 990,000 acres. This scrip was bought by Mr. Cornell for about \$500,000, and to this he added an equal sum from his own pocket. The land was located in the timber districts of Michigan, and now, at the end of twenty odd years, has realized to the college some three millions of dollars. The question is, whether the whole of this should be devoted in accordance with the original grant, or whether, on account of Mr. Cornell's additional contribution, and the large amount realized through his foresight, the college is only bound to devote a portion of the fund to education in agricultural and mechanical arts. We would call attention to what our correspondent H. N. has to say upon the matter.

SETTLEMENT OF LABOR DIFFERENCES.

WHETHER the pamphlet¹ from the pen of Mr. Joseph D. Weeks, which the Society for political education has just published, was or was not timed to the present crisis, we are not aware; but,

¹ New York, Putnam, 1886. 12°.

coming just at this time, both its value and its influence will be increased. The pamphlet is entitled "Labor differences and their settlement, a plea for arbitration and conciliation," and it is an able exposition of the causes underlying our present labor difficulties, together with an argument in favor of arbitration as the best method for their settlement.

No thoughtful man can have watched the development of labor troubles during the last few years with any feeling short of anxiety. The increase in the number and frequency of strikes, the growing percentage of them that are successful, the hostility and ill feeling too often shown by employers and employed, have all forced themselves upon our notice, but society seems helpless before them.

Much of this, perhaps all of it, is due, we dare assert, not so much to a misunderstanding of the questions immediately under discussion as to absolute ignorance of the conditions underlying those questions, and moulding their form. Philosophy and science have taught us to view society as having developed from its early militant to its present industrial type along certain well-defined lines. But some how or other we feel an irresistible desire to view this process as complete, to consider the book of evolution closed, and to congratulate ourselves on being the summation of an infinite series. This false conception affects our actions. We fail to see that society is still changing and developing, that the laws that operated in the past are still at work.

This crude philosophy enters as a factor into our present labor complications when they are seen from a scientific stand-point. Old theories will not fit new facts, nor will antique remedies cure new troubles. Almost without an exception, employers look upon the employees as their inferiors, and treat them as such. From this follows ill feeling, desire for retaliation, perhaps criminal recklessness. We overlook the fact that the old feudal relation of master and servant is a thing of the past, and is not represented in our present economic organization. As Mr. Weeks acutely points out, discussions between employers and employed are 'permitted' by the former, interviews are 'granted,' committees are 'recognized.' Now, we need not blind ourselves to the ethical fact that there is a superiority of possessions as well as a superiority of physical force and of intellect, but in economic matters it cannot safely be pushed very far. The employers must climb down from this feudal pedestal, and meet their workmen on a level. Before the law and at the ballot-box, every man counts as one, and no more; and it is unreasonable to expect that in economic

relations one party to a contract shall count as infinity, and the other as zero.

In the second place, a false political economy must bear its share of the responsibility. The employers have come to think that they pay the wages, and therefore may settle them as they see fit. But the wages question is, as Mr. Weeks says, a problem in distribution, and wages are paid out of the product (p. 11). By a figure of speech, they are paid by the employer, because, as industry is now organized, the product—the result of the combined effort of capitalist and laborer, we must always remember—goes into the hands of the employer as trustee, and he advances to his laborers each one's share as previously determined upon. Perhaps not even the laborer himself understands this clearly. The present methods have been in operation so long and on so enormous a scale, that it is not easy to look beyond them and see what they really stand for.

These two facts are typical of the steps to be taken in settling any labor dispute. The method laid down for scientific procedure by Bacon can find application in the field of industrial problems. First, we must clear our minds of all idols, all false notions and mistaken prejudices as to the inequality of the employer and the employed; and, second, we must observe facts and relations as they are, and not as it may suit our ideas to have them.

It is in these fundamental conditions that labor troubles arise. Strikes, lock-outs, boycotts, and so on, are the effects, not the causes, of labor troubles. By repressing them we are only sitting on the safety-valve. Hidden but potent forces are at work, and as sure as fate they will break out in another place if repressed in one. What we want is prevention of strikes, not a cure for them.

Have we any such prevention to suggest? Yes: we follow Mr. Weeks in favoring permanent boards of arbitration in which employers and employed are equally represented, presided over by a disinterested umpire. The great advantage of a permanent board of arbitration, holding stated meetings, is that it builds up an *entente cordiale* between the capitalist and the laborer. They learn to sympathize with each other, to know that an industrial problem may present two very different aspects from two different points of view; to see, in a measure, through each other's spectacles. The trouble with a temporary board of arbitration is that it is formed after the friction between the two parties has begun. It meets after a declaration of hostilities, not before; and its members, feeling that they have a certain position to defend, assume a semi-belligerent attitude. The theoretical advantages of a permanent board are forcibly

supported by the evidence Mr. Weeks cites from practice. In the hosiery and glove trade at Nottingham, England, a board of arbitration was established in 1860, and since that time not a single general strike nor difference about wages has occurred that was not settled amicably. The iron trade in the north of England has a similar story to tell. The *Conseils des prud'hommes* in France and Belgium bring cumulative evidence.

A coming-together of this kind every month or six weeks, and meeting as equals for the discussion of affairs of common interest and importance, would have a magic effect in ascertaining the facts and suggesting concessions, as well as in removing that false pride and foolish obstinacy that aggravate so much every dispute about labor. The present appeal to brute force is as absurd and worthless as it is antiquated. It is economically and ethically a crime. Knowledge, moderation, and Christian charity will permanently re-organize industry on a plane where the strikes and boycotts of mediæval inheritance will be unknown.

NICHOLAS MURRAY BUTLER.

APPARITIONS AND HAUNTED HOUSES.

THE committee on apparitions and haunted houses, of the American society for psychical research, have issued a circular to invite communications from persons who may be able to help them in an examination of the phenomena that fall within their province.

They particularly desire information regarding supposed cases of apparitions of absent or deceased persons. It is well known that from time to time there are related or published accounts of people who are said to have seen, as present, persons who were at the time actually either absent or dead. As a proof of the genuineness of these appearances, the accounts frequently add that the persons who have had these experiences have learned, through them, about some otherwise unknown facts, afterwards verified; such, for instance, as death or illness, or some other calamity which has actually happened, at or near the time of the apparition itself, to the distant person whose appearance is narrated. Other proofs of the reality and significance of the supposed apparitions are sometimes narrated.

The committee wish to collect accounts, from trustworthy sources, of all such alleged occurrences, as well as accounts of other similar personal experiences which may have been striking enough for the persons concerned to remember, or perhaps record. Such accounts the committee propose to collate and examine, with a view to drawing such conclusions from them as may seem

proper and warranted. In order that the results, if any are reached, may have value, the committee, while not wishing to exclude any information likely to be useful, will be especially glad to hear directly from the persons themselves who have had the experiences in question, with such further information as will enable the committee to verify the accounts given, whether by the accounts of other witnesses, by the use of documents, or by means of other collateral testimony. Persons who have information bearing on the matters before the committee may find the following questions useful guides in stating their evidence. Such answers as can be furnished, in any case, should be given as explicitly as possible, in the communications addressed to the committee.

1. To whom and when did the experience in question occur? What was his (or her) age, nationality, and occupation; and what was his (or her) state of health or of mind at the time of the apparition? At what hour of the day did it appear, and at what place?

2. Had the narrator of the experience in question ever had hallucinations, or seen apparitions before, or has such an occurrence ever happened since? If so, describe these other experiences, giving their time and place, and compare or contrast them with the one in question.

3. Does the narrator believe in ghosts? Or has he, before this experience, believed in apparitions of any sort, as probable sources of knowledge about absent or dead persons?

4. To what senses did the apparition appeal? If it appeared clearly to the eye, describe the color, the form, place, apparent distance, size, clearness, the length of time of endurance, and all other remembered qualities of the object seen. Was it 'as large as life,' i.e., as large as the person or thing supposed to have been seen would naturally have appeared? Were the other objects present at the time (such as the real wall, or a real table or chair) visible through it? Did it stand still, or move about? Did it remain clear, or come and go? Could it be touched? Was it seen in the darkness, or in the light? If the experience in question was not something seen, but something heard or felt, describe it as clearly as possible, and in a similarly definite manner, laying stress on whatever may show exactly what was experienced.

5. If the apparition seemed to give warning, or other knowledge of any future or distant fact, did the narrator relate the incident to any one, or give notice of the warning conveyed, *before* he was able to verify the facts supposed to have been revealed? Did he *record* these facts before he verified them? If so, is the record now extant, or