

# SCIENCE.

---

FRIDAY, JANUARY 14, 1887.

---

## COMMENT AND CRITICISM.

THE DANGER of long-range weather-prediction, even of the cautious kind lately indulged in by Dr. Hinrichs, is forcibly illustrated in the statements given in the advance proof of the Iowa bulletin for December. The month is described as very cold, fair, and dry, the mean temperature of the air being more than seven degrees below the normal. Only once in the past sixteen years has Iowa had a colder December (1876). This is not a satisfactory verification of the statement made a month ago: "The probability is very high that the winter now begun will be a mild one in Iowa and the north-west." Apparently as a comment on this discordance, Dr. Hinrichs says, "January will, it seems, also run decidedly below normal. February may be markedly above normal, and contribute greatly to reduce the severity of the winter [a possibility very much to be desired]. During the forty years preceding 1883, there never have been more than two consecutive cold winters in Iowa; namely, those of 1856 and 1857. Beginning with 1883, we have now had four severe winters in unbroken succession, and these winters have not been followed by a month of severe weather this winter. This is entirely without precedent, and of very serious import to the people of Iowa." That seems to be the difficulty: the weather cares too little for precedent.

THE HOLIDAY EDITION of the *Age of steel* deserves attention because of the number and interest of the economic articles it contains. In fact, it seems more like an economic than a technical journal. It is somewhat of a novelty, too, to find that the economics are thoroughly practical, the theoretical and speculative element occupying a very subordinate place. M. Godin, the founder of the Familistere, tells again briefly the well-known story of that institution. At the end of his article, the philanthropist grows confidential, and points out the principal obstacle with which his foundation has to contend. That obstacle is, as might have been suspected, nothing less than human nature itself. And it has happened in this

way. The association has made large profits, which have been published every year. A knowledge of the detailed operations of the concern is accessible to the public. Just here the difficulty presented itself.

In the language of M. Godin, "instead of studying them [the annual balance-sheet, and so forth] for the purpose of imitating us by organizing labor, this is the way the filibusters in industry have argued: they have said to themselves, 'The Association of the Familistere pays actually about 1,800,000 francs (\$360,000) in wages. If we establish a similar industry, copy its products, and pay 50 per cent less to our operatives than the Society of the Familistere pays theirs, we shall realize profits amounting to nearly a million more than it; so that it cannot compete with us, except it lowers wages,—a thing it cannot do, since its operatives are associates in its industry: thus we can beat them in the market.' These arguments have been carried out in practice, so that the Association of the Familistere has to-day to compete with establishments that let down wages to their lowest point, and, by these means, practise a deplorable competition, which push the wage-workers to strike and misery." These 'wrongs of egoism,' as M. Godin calls them, are the very things that idealists and reformers of all ages have had to contend against; and the fact that they are certain to recur is the neglected factor in the calculations of so many of the social reformers of our own generation.

PROFIT-SHARING is also the subject of several articles in the same journal. Prof. J. B. Clark of Smith college, and Frank A. Flower, commissioner of labor for the state of Wisconsin, write favoring profit-sharing; but the testimony of two large concerns—the Crane Brothers manufacturing company of Chicago, and the H. O. Nelson manufacturing company of St. Louis—is of more importance and value than any hypothetical arguments can possibly be. Mr. Crane says that his company has tried with much success the plan of permitting the employees to buy stock in proportion to their yearly salary, but, as in many cases the workmen are not prepared to buy the amount

apportioned to them, the plan has been adopted of allotting the stock to them, they enjoying the benefits of it less interest. To this plan, as to any other scheme of profit-sharing, the objection is raised that in bad times it passes into loss-sharing, and this is not what the employees want or will submit to. In view of this, Mr. Crane believes that a surplus fund should be established, from which dividends are to be paid during years of depression, when there is no profit from which to pay them.

Mr. Nelson bears similar testimony to the working of profit-sharing in his company. In March last, the company issued a circular establishing profit-sharing. After allowing seven per cent interest on actual capital invested, the remainder is to be divided equally upon the total amount of wages paid and capital employed. The employees will this year receive about two-fifths of the net profits. The books have not yet been closed for the year, nor the dividend declared, but there is ample evidence of the success of the experiment. At the conclusion of the firm's present fiscal year, the scheme is to be elaborated somewhat. Ten per cent of the profits is to be set aside as a provident fund for sick and disabled members and the families of deceased ones, ten per cent as a surplus fund to cover losing years, should such occur, and two per cent as a library fund, the company paying interest on any unused portions of such funds. The allotments are also to be so apportioned that a premium is offered for continuous service and the saving of dividends. Evidence such as this from the sphere of practical business should be of great help to economists in developing their theories.

THE ITEMS APPROPRIATED by the house for the support of the U. S. coast survey during the next fiscal year are the same as those at first recommended by the house last year, and far under the estimates. If the senate should agree to the penurious policy of the house, a large reduction in the *personnel* of the service must ensue, and its utility would be sadly impaired. We cannot believe the senate will agree to the recommendations of the house in this important matter. The coast survey is doing good work, which should be encouraged by congress, and liberal appropriations should be made for its proper support.

### IS BEER-DRINKING INJURIOUS?

WE have before us a direct and unqualified challenge to the prohibitionists in the form of a pamphlet on 'The effects of beer upon those who make and drink it,' by G. Thomann (New York, *U. S. brewers' assoc.*, 1886). The writer boldly presents the following propositions. 1. Brewers drink more beer, and drink it more constantly, than any other class of people. 2. The rate of deaths among brewers is lower by forty per cent than the average death-rate among the urban population of the groups of ages corresponding with those to which brewery-workmen belong. 3. The health of brewers is unusually good: diseases of the kidneys and liver occur rarely among them. 4. On an average, brewers live longer, and preserve their physical energies better, than the average workmen of the United States. The writer claims that beer is a perfectly wholesome drink, and, in support of this claim, refers to investigations made in Belgium, France, Holland, and Switzerland. He quotes also from the report made by a sanitary commission appointed by President Lincoln to examine the camps of the Union army and their sanitary condition. In examining the condition of regiments in which malt-liquors were freely used, the commission found not only that beer is a healthy beverage, but that it possesses hygienic qualities which recommend its use for the prevention of certain diseases. Mr. Thomann states, that, wherever the effects of the use of beer upon the human body have been examined methodically by competent physicians, it was found, to use the words of Dr. Jules Rochard of the Académie de médecine of Paris, "that beer is a very healthy beverage, which helps digestion, quenches thirst, and furnishes an amount of assimilable substances much greater than that contained in any other beverage."

The charge is often made that American beer is composed of so many poisonous ingredients that it is thereby rendered unfit for consumption; that, while pure beer may be harmless, such beer as is supplied by brewers at the present time in this country is positively injurious. This is met with a reference to the report of the New York state board of health, in which it is stated that an analysis of four hundred and seventy-six samples of malt-liquors had been made, and that they were all found perfectly pure and wholesome, and to contain neither hop-substitutes nor any deleterious substances whatever.

The most interesting portion of Mr. Thomann's pamphlet is that which deals with the statistics of the physicians under whose professional care the men employed in the breweries are placed. About five years ago the brewers of New York, Brook-