

this immense income were over £17,000. Under these circumstances, "it appears to your directors that the only course left open is to liquidate the company, with a view to reconstruction." That liquidation is necessary there is no doubt; but what object will be gained by a second reconstruction, beyond further loss to the shareholders and further fees to the directors, it is hard to see.

The slandering eulogies of the Halifax *Critic*, whose endorsement of the notorious Dobson and others of like ilk is well remembered must be very comforting to Mr. A. A. Hayward. He has our sympathy.

A contribution to the Halifax *Herald* thinks the REVIEW made an "onslaught on one of Waverley's gold mining industries" in its article on the Lake View Syndicate. We have made diligent inquiry and find this "industry" has been closed since April 1892. We were not (and are not) aware that locked buildings and absence of employees constituted an "industry." The same contributor imagines that the "criticism" is that of a "jealous rival." Did any one ever before hear of a rival to a moribund failure!

The Halifax *Chronicle* is quite right in saying that the functions of the REVIEW as an official organ of any Society cease with the publication of the official reports of that Society. No society, association, clique nor individual, excepting only the Editor, has any control *whatsoever* over the opinions or statements of this journal, which will continue in the future, as in the past, to be fearless in its exposure of what it believes to be wrong or detrimental to the mining interests of the country. No single article published in the REVIEW on a doubtful mining scheme has ever before in so short a time found so complete a justification of its warning as is evidenced by these acrimonious articles in the Halifax papers, which seek to make the matter one of personalities rather than one of facts.

With that characteristic caddishness and utter disregard of truth which has earned for it the contempt of the mining men of Nova Scotia, the Halifax *Critic* publishes a statement to the effect that a well known Nova Scotia mining man has a heavy financial interest in the REVIEW and that its editor must publish what this gentleman sends to him. Now we need not tell our readers—for the personality of the REVIEW is thoroughly well known throughout Canada—that such a statement is a deliberate and malicious lie. Moreover the *Critic* knows it.

Dr. A. R. C. Selwyn, Director of the Canadian Geological Survey, again urges the opening of the museum to the public on Sundays. He says:—"There will doubtless be strong objections urged against such action, based chiefly, if not entirely on the very erroneous, but unfortunately very prevalent idea, that a museum is a place of amusement, whereas it is essentially a place of instruction as is the church and Sunday school; and the principal difference between the

two, concisely stated, is, that in the museum the *work*, and in the church and school the *word*, of the *Creator* is expounded. This admitted, there seems no obvious or intelligible reasons why the one establishment should be closed and the other opened on the Sabbath. Since the foregoing was written, I have sought opinions on this subject, and I have been much gratified to find such a large number of persons, including clergymen of various denominations, who regard the opening of the Museum on Sunday afternoons favorably, and think that to do so could not prove otherwise than advantageous to the community, and especially to that very large class of person whose daily occupations leave them no time in which they can avail themselves of the valuable information and instruction which the Museum is designed to afford."

All of which we heartily agree with. But in the meantime, if Dr. Selwyn is sincere in his desire to be a benefactor to the working classes, why not open the Museum on *public holidays*, and extend the hours of admission on week days so that the working men can study the work of the *Creator after four o'clock*. It seems to us much can be accomplished by the Doctor before he intrudes on the day of rest.

The Hardy Patent Pick Company Limited, of Sheffield, are introducing a new patent disintegrator called the "Multiple," for producing fine and impalpable powders. This disintegrator reduces material by percussion, and is so constructed that the substances are subjected, as they progress through the machine, to the percussive action of several separate sets of beaters of increasing lengths and velocities, working in separate chambers. The whole circumference of each chamber is provided with serrated linings of excessively hard chilled iron, which are used as grinding surfaces, and this arrangement, it is claimed, gives about eight times the grinding surface of any other percussive disintegrator of equal size. The chambers increase in diameter as they approach the outlet, and the fan action of the large beaters in drawing the air from the chambers of the smaller ones, produces a through current of air from the inlet to the outlet. The material enters the smallest beating chamber, and from thence passes through the others, being subject to repeated percussive action, increasing in intensity in each successive chamber, and the current of air is continually carrying away the finished material. In the production of fine powders, this machine is not dependent upon grids or screens, as is the case with other percussive machines; but provision is made for a screen if it is deemed desirable to use one. This may be placed at the outlet, but it is not subjected to any beating action, and is only used when necessary to prevent any small pieces of un-reduced material from escaping. The special features of this machine are its large grinding surface, its adaptability for fine grinding, producing a beautifully soft and even sample, and treating materials that cannot be dealt with in any other machine.

The total dividends paid by the Witwatersrand mining companies in 1892 amounted to £833,212, or about 16 per cent. of the gold output reported for the district; the greatest amount paid by any one company, £190,312 by the Robinson, being at the rate of 7 per cent. Other companies paying a less amount made a better return to their stockholders. Thus the Ferreira paid £56,250, or at the rate of 125 per cent.; the Crown Reef, £63,000, or at the rate of 55 per cent.; the Jubilee, £17,502, or at the rate of 60 per cent. The Birthday Mining Company, in the Klein Letaba district, paid £22,150, or at the rate of 15 per cent. on its capital stock. The South African mines at present are making larger returns to English owners than these are receiving from their investments in any other country.

At the Rock Springs coal mine, Rock Springs, Wyoming, an electric locomotive has been introduced to haul a number of trucks a distance of 6000 feet. The current is supplied by a dynamo located a mile distant from the mouth of the mine, the generating pressure being 550 volts. The loss in transmission from the power house to the mine is about 10 per cent., so that the current received at the mine has an electro-motive force of about 495 volts. The locomotive, which is of 60 horse power, is of 30 in. gauge, and it collects the current from an overhead wire, the rails forming the return. It hauls 30 trucks, which when filled weigh 40 tons.

How strangely one can sometime come across the ancient and the modern in machine-tools still working side by side in some of the engineering-shops! "The other day" says the *Iron monger*, "I went through an engineering-works in Lancashire, and saw the larger hammer, 'Thor,' put down by Nasmyth to forge guns, about forty years ago, and, although altered in the valve-motions, still running, and doing good work in forging cranks and shafts up to 10 tons weight. In the same works I observed several other of Nasmyth's tools, one a wheel-cutting machine made about forty years ago, and another the first slot-drill patented by Nasmyth forty-three years ago—both still doing excellent work, in company with similar tools made by the leading tool-makers of to-day—while in other portions of the work were some of Nasmyth's original patent shaping-machines, working alongside with others by Whitworth and Muir. Again, as illustrating how some so-called modern arrangements are very frequently anything but new, I noticed in one of the shops cast-iron coiled piping fixed around the columns for warming the place with steam, this principle of coiled piping, which has been applied as something new in recent years, having been fixed in these works for nearly half a century."

In the western parts of Mongolia, there are such rapid alterations of temperature that ordinary bricks, and even the usual building stones, disintegrate very rapidly. The inhabit-