

SCIENCE.

FRIDAY, OCTOBER 16, 1885.

COMMENT AND CRITICISM.

THE INTEREST EXCITED in England by the address of Sir Lyon Playfair before the British association is well shown in the comments of the London press, which are summarized in an article in *Nature* for September 24. The subject of state aid to science has been before the English public for many years, but has never attracted at any time the same earnest and general attention that it has since Sir Lyon Playfair's address. The comments of the London *Times* upon the address probably best show the condition of public opinion upon the question in England. The *Times* acknowledges the reproach that countries less wealthy than England make efforts to encourage science, by the side of which the encouragement afforded in England by the state sinks into insignificance; but it urges that, aside from state aid, there are the large ancient endowments for the benefit of education, which, although they may still be largely misapplied, yet could be used for the encouragement of science if vested interest and lack of intelligent initiative did not stand in the way. The *Times* urges that, until these obstacles are removed by the pressure of an active intelligent public opinion in England, the state itself can hardly be expected to do more than it does.

THERE HAS LATELY GONE THE ROUNDS of the press a description of a meteorite which startled south-western Pennsylvania on September 26. It was reported that it finally struck the earth on the farm of Mr. Buckston, Jefferson township, Washington co., near the West Virginia line. The stone was said to have been broken into three pieces, which became partly buried in the ground. The color was described as gray with streaks of red running over it, and the size of the meteorite was given as from 30 to 50 feet in diameter. The last statement was not, however, received by all as probable. We wish to call attention to a letter in another column, from Prof. S. P. Langley of the Allegheny observatory, who sent one of his assistants to examine into the truth of the reports. It seems that the 'red streaked' meteorite, 50 feet in diameter, is a fiction of the news-gatherers.

TIMING THE FLOOD ROCK EXPLOSION.

HOWEVER successful the explosion at Flood Rock may have been as to its main feature in the removal of an obstruction to navigation, it is to be regretted that one of the minor features of considerable scientific interest should have been seriously interfered with by the blundering delay in the time of firing the mine. At the request of the U.S. geological survey, observers at a dozen or more observatories within 200 miles of New York were watching to note the time of arrival through the ground of the tremors from the explosion, observing in most cases with their meridian-instruments over the mercury nadir-basin, much the most powerful and sensitive apparatus for detecting tremors.

Reports at hand up to time of writing indicate that out of 17 stations (3 occupied by geological survey parties and 14 co-operating with them) 5 hung on till the disturbance came and got more or less satisfactory observations (at one of these the rock was directly in sight, and the others so near that the observers felt sure that it had not escaped them); 4 observed and timed some slight disturbances between 11^h 3^m and 11^h 7^m, and, attributing them to the explosion, ceased watching for more, and either missed it entirely or were taken by surprise with chronographs stopped, etc.; 2 heard nothing at all up to about 11^h 10^m, and so ceased observing, and missed it; and 6 are yet to be heard from. The observations of those who got any records at all must be considered as due to persistent pluck and good luck rather than the natural and easy result of intelligent co-operation on the part of the army-engineers.

H. M. PAUL.

SCIENCE AND THE STATE.

SIR LYON PLAYFAIR, in his recent address before the British association in Aberdeen, said much that was instructive and suggestive in respect to the progress of science, and the conditions on which it depends; but there is one portion of his address which is entitled to careful perusal, because the speaker is one of the few men in the world who has had the training of a man of science and of a statesman. His early career, as the older readers of *Science* must be aware, was that of a chemist; and of late he has been an active