electron leaving a helium atom with an ionisation potential of 24·5 volts, in order to form a neutral hydrogen atom possessing a much smaller ionisation potential.

Singly charged helium atoms apparently do become neutralised, since they rapidly disappear as the pressure is increased. At 0·01 mm. pressure they are much weakened, and are entirely absent at a pressure of 0·027 mm. of mercury. Charged hydrogen *molecules* disappear at a higher pressure (0·07 mm.) than the charged helium atoms. They are probably dissociated without alteration of velocity or direction, at collisions with the helium atoms, since their disappearance, as the pressure is increased, is accompanied by the appearance of a group of protons with the slow velocity of the original molecules.

A. J. DEMPSTER.

University of Chicago,
November 9.

Winter Thunderstorms, 1925.

A LARGE number of reports were received in response to an appeal for observations of thunderstorms occurring in the British Isles during the first three months of this year. The following table shows the number of days on which thunder or lightning was reported:

1925.	England and Wales.	Scotland.	Ireland.	British Isles.
January . .	10	12	10	17
February . .	20	10	8	23
March . .	16	5	4	17
Total (3 months)	46	27	22	57

The stormiest areas in England were mainly on or near the south coast, and in Scotland they were in the central part of the west coast. Large areas in the northern and midland counties of England, and a large part of Wales, were free from storms.

The investigation will be continued during the first three months of 1926, and in thanking those who sent information last winter, may I ask for similar reports next year?

S. MORRIS BOWER.

Langley Terrace,
Oakes, Huddersfield,
December 1.

A Further Case of Sub-Harmonics.

THAT notes may be produced by the intermittent contact of a tuning-fork and another body, the frequencies being sub-multiples of that of the fork, has been shown in my earlier communications (NATURE, March 8, 1924; *Phil. Mag.*, January 1925). This letter is to point out that such sub-harmonic notes can also be obtained by rubbing with a wetted finger on or near the rim of an ordinary thin tumbler or of a wine-glass. The note most easily obtained corresponds to the fundamental "bell" mode of vibration in four segments, as may be seen by the ripples produced on a little water placed in the glass (one of the four nodal lines ends at or near the moving finger). By pressing harder and moving the finger more slowly, notes of a half, a third, and a quarter of the frequency of the above note can similarly be obtained. All these notes fall in pitch simultaneously when more water is placed in the glass. (Another note may occur, apparently due to the simple torsional vibration of the glass. This note is unaltered in pitch by varying the amount of water.)

W. N. BOND.

University College, Reading,
November 9.

The London Skull.

As Prof. Elliot Smith states in his letter to NATURE of December 5, a sample of the blue clay in which the skull was found at Lloyd's has been forwarded to me for examination at the instigation of Mr. Warren B. Dawson.

I am anxious to remove at once any possible misunderstanding regarding the results of my examination. It may have been thought that as I was familiar with the brick-earths in East Anglia, in which Mr. Reid Moir has found so much evidence of Mousterian culture, I might be able to establish some kind of correlation. As I pointed out at once, however, to Mr. Dawson, this was unlikely. The blue clay happens to be lithologically different from the Mousterian brick-earths of Suffolk, but even if it were similar petrographically, I should still regard its indigenous fauna as the only safe basis for correlation and determination of age.

My examination of the inorganic constituents of the clay may throw light on the conditions of deposition and the source of the material. I must leave the question of its age in the competent hands of Messrs. Bromehead and Hinton, who I hope will find it possible to arrive at an agreement.

P. G. H. BOSWELL.

Department of Geology,
University of Liverpool,
December 7.

Early Use of Lightning Conductor.

MR. H. C. BROWNE, in a letter on the early use of the lightning conductor (NATURE, Aug. 15, p. 242), quotes the "Tableau de Paris." Readers of NATURE may wish to refer to this interesting work. The "Tableau de Paris" was published between 1781 and 1788 in twelve volumes, by L. S. Mercier. The chapter quoted by Mr. Browne is of 1783. In the last volume of the collection is another chapter on the same subject, in which Mercier recants his former belief in the lightning conductor; he says: "In a city of 800,000 souls, I have not seen, in forty years, a single person killed by lightning."

Mercier's incredulity in scientific matters culminated, many years later, in a work the title of which speaks for itself: "De l'impossibilité du système astronomique de Copernic et de Newton" (Paris, 1806).

T. V. BENN.

Clermont-Ferrand,
October 31.

A Gift of Fleuss Vacuum Pumps.

WE have for disposal a few Fleuss vacuum pumps suitable for laboratory experimental work. The pumps can be either hand-worked or power-driven by a belt on the fly-wheel. They occupy a floor space of about 24 in. × 14 in. So far as the number available permits, we should be pleased to give one to any university laboratory or educational establishment in Great Britain where such a pump would be of value for experimental work.

The object of this letter is to make the fact known in the hope that any one desiring one of these pumps may see this letter and communicate with us direct.

C. C. PATERSON.

Research Laboratories of the General
Electric Company, Ltd.,
Wembley, December 8.