

froze instantly on touching a solid object. In driving through Richmond Park I noticed the branches bending under a weight of clear ice, and, what was even more remarkable, the windows of my cab becoming thickened by a layer of ice while the temperature was just at the freezing point. Rain had been falling continuously until the afternoon, when the drops began to solidify on contact. From roofs and gates long icicles were formed, increasing in size; the grass was sheeted with ice, although the ground had not been chilled by frost.

It is not easy to explain the passage of very cold drops through a warm layer of air without their temperature being raised nearly to that of the layer, but, since the objects on which they fell must have been above or about the freezing point, the drops must have brought with them a degree of cold sufficient not only to cause instant solidification, but to retain the solid state some time after falling and to refrigerate the objects. The size of the drops was not unusual.

ROLLO RUSSELL.

PROF. MELDOLA in his letter (NATURE, February 1, p. 447) refers to a similar occurrence to that described by me in NATURE of January 25, and he says, "it must, I think, have been in 1866 or 1867." Prof. Meldola adds that there must be many Londoners now living who can remember the occasion.

I well remember the occurrence, and my brother, Mr. J. S. Harding, skated round Belgrave Square and the immediate neighbourhood for two or three hours.

May I give the following extract from my Meteorological Register, kept in the neighbourhood of Belgravia, which shows the time and nature of occurrence?

"1867, January 22.—Slight rain from 7.20 p.m. to 10 p.m., half congealed before it reached the ground, and forming almost simultaneously with its fall a sheet of ice upon the earth, evidently the result of rain falling from a stratum of warm air at no great distance from the earth, and not having sufficient time to be converted from rain before reaching us."

This was the close of an exceptionally severe frost; my screen temperature on January 5 was 6.5°, the lowest I have observed, and the Greenwich reading was 6.6°.

I think some meteorologists would call the phenomenon referred to by Prof. Meldola a silver thaw; it is perhaps somewhat different in character from a glazed frost, and is a sure precursor of a thaw.

CHAS. HARDING.

THE following note is to be found amongst the "Meteorological Observations" at the end of "The Natural History of Selborne" under the title of "Frozen Sleet," and appears to be an example, and a remarkable one, of the phenomenon of "glazed frost":—

"January 20.—Mr. H.'s man says that he caught this day in a lane near Hackwood Park many rooks, which, attempting to fly, fell from the trees with their wings frozen together by the sleet, that froze as it fell. There were, he affirms, many dozen so disabled.—White."

ANDREW WATT.

Scottish Meteorological Society, Edinburgh,
February 10.

ON Monday, February 5, I was in Bruges; about 8.15 p.m. I heard what I thought was hail beating upon the window panes. On leaving the house about fifteen minutes later I found that everything was covered with a film of ice at least a quarter of an inch thick. The phenomenon of "glazed frost" was very well marked, particularly upon the iron railings which run along the side of the canals, and upon the twigs of the trees. The stone cobbles with which the streets are paved were completely covered with smooth ice, and the roads were almost impassable; I saw five people fall down in as many minutes.

FRANCIS G. BELTON.

336 Belgrave Road, Birmingham.

THE letters of Mr. Harding (NATURE, p. 414) and Prof. Meldola (NATURE, p. 447) recall the following:—

On February 5, about 7.30 p.m., a heavy shower of rain, which lasted for fifteen minutes or so, suddenly fell.

NO. 2207, VOL. 88]

Being caught in this shower, naturally I hurried, but quickly found myself slipping rather than walking along, since as soon as the raindrops came in contact with the earth they apparently froze, the roadway quickly becoming covered with a coating of ice, which had a very glazed appearance. A stick which I had in my hand also became coated, and was quite "glassy" to the touch.

Although the shower was of so short a duration, the younger element of the people about at the time enjoyed themselves sliding along the Promenade and down the main street (which has a fair slope).

The temperature during the day was about 32° F., but at the time of the shower it was about 33° F.

E. WYNDHAM JEFFREYS.

University College of Wales, Aberystwyth,
February 10.

Human Eyes Shining.

WITH reference to the last paragraph in the letter by Colonel J. Herschel in NATURE of January 18, I have sometimes seen human eyes reflecting light in the way described, though, as indicated in the letters to NATURE, it is difficult to get in the right position for seeing such an occurrence. I have never tried a dark lantern. The best instance I have seen was in 1876, when I observed the light from an oil lamp inside a little girl's eyes. It was best seen when my head was between the lamp and her, and when the shadow of my head nearly came upon her eye. It appeared to be her retina that was illuminated; it was a bright orange-red, but varied in the amount of red. When my eye was nearly in the same direction as the lamp, the whole pupil was equally illuminated, but when less nearly in the same direction the side of the pupil next my shadow was the brightest, or the only part illuminated. The illumination was stronger when she looked to one side of the lamp than when she looked at it. Her sister exhibited the phenomenon less strongly, though still brightly, but her father very slightly. In the external appearance of these eyes there was nothing unusual.

I have tried to see this phenomenon in my own eyes in a looking-glass, with the sun as illuminator, but could only see a very faint illumination, very different from the above-mentioned cases.

I have never used an ophthalmoscope, but I understand that when an eye is so observed the light is red or orange.

T. W. BACKHOUSE.

West Hendon House, Sunderland, February 10.

Chalk and Ice.

I HAVE read with much interest the letter on "Chalk and Ice" in NATURE of February 8, as I had observed the same phenomenon on January 7 of last year.

There had been heavy rain all the previous day and a sharp frost at night, when, in walking over Ballard Down from Swanage to Studland, in the early morning, I noticed lumps of chalk with fibrous masses of ice adhering, the ice in some cases being larger than the chalk fragment.

The soil consisted of sandy clay resting on the dip slope of the chalk, and fragments of the latter were very numerous, each with its adherent ice, which, on account of its prismatic structure, sparkled in the sunlight with bright flashes of colour, the effect being very beautiful.

The formation of ice below the surface, as suggested, is interesting, as it would certainly be an important factor in the gravitation of soil on a chalk slope during cold periods.

R. W. POCOCK.

28 Blomfield Road, W., February 9.

Candlemas Day.

IN addition to the proverbs about the weather on the second of February quoted among the Notes in last week's NATURE, allow me to give the following, which was told to me by the late Dr. Corrie, Master of Jesus College, Cambridge:—

"Si sol splendescat Maria purificante,
Majus erit frigus post festam quam fuit ante."

O. FISHER.