end of a lane (Northbrook) leading to some fields, the hedge on the right for some yards was lying in the road, but the field beyond at this point presented only the appearance of an ordinary storm, while the lane itself was like the bed of a river. To the left was a field of standing grass; for about twelve feet from the hedge the grass remained intact, then for about the same distance it was as though it had been mown down. This torrent, for such it might have been compared to, came to almost a sudden termination a little above the end of the lane, but it extended down the Hill till it was joined by two others, one of which had carried a hedge away bodily.

The increased volume of water then poured down over some gardens, uprooting trees and vegetables; in less than ten minutes the hedges were lost sight of, and the water rose to a height of eight feet. This was occasioned by a block caused by an arch, which carried off the water from a small stream, not being large enough to take the increased volume. Finally it burst over, scooping the ground out in front of some cottages several feet deep and flowed on as a river some yards wide, again destroying gardens in which were valuable stocks of vegetables.

Near this point the volume of water was again increased; in all five distinct water-courses could be made out, all of which had done considerable damage to grass, cornfields, and gardens. Finally, all united in one body and poured into the village of Weston, levelling three walls as it came, and thence passed into the river Avon.

I gather from spectators at Kelston Hill that it began to be cloudy at half-past four in the afternoon; at five there was a rattling clap of thunder, followed by a downpour of rain—in "bucket-fulls," as one expressed it; but all seemed to agree that the greater portion of the water fell under the brow of the hill, where it came down in several columns. There were no houses close to the spot; had there been they must have been washed away.

The atmosphere had been perfectly still all day, but very sultry. Heavy rain fell in the neighbourhood, and the storm to which I have referred specially was accompanied with hail, which in a few minutes covered the ground some inches deep.

What I have described is no doubt what is popularly termed a waterspout.

The damage done was at first estimated at 2,000*l.*, but it is now feared that this amount will not cover it.

Weston, near Bath, June 17 E. WETHERED

Fortunate "Escape"

AN evening paper of to-day's date has the following:—

"HOUSE STRUCK BY LIGHTNING.

"During the thunderstorm yesterday, at about 2.30 P.M., a large stack of chimneys at the residence of Mr. Robert Avis, at Putney, was struck by lightning, which split the chimney-shaft down the whole height, the electric current passing down the chimney and into a sitting-room on the ground floor. *The door of the room was fortunately open, and the current escaped without causing injury to the family*, who were in the room at the time of the shock."

The italics are those of one ELECTRIFIED

June 17

Velocity of Light

WILL you have the kindness to publish the following as a preliminary announcement:—

The following method of measuring the velocity of light dispenses with Foucault's concave reflector, and permits the use of *any* distance.

In the figure, s is a division of a scale ruled on glass; m, a revolving mirror, l, an achromatic lens; s'', a fixed plane mirror at any distance from l.

The point s is so situated that its image s' reflected in the mirror m is in one of the foci of the lens l, while the image of s' coincides at s'' with the mirror, the latter being placed at the conjugate focus. With this arrangement, when m turns slowly, the light from s'' is reflected back through the lens, so that an image is formed which coincides with s. When, however, the mirror rotates rapidly, the position of m will have changed while the light travels from m to s'', and back again, so that the image is displaced from s in the direction of rotation of the mirror.

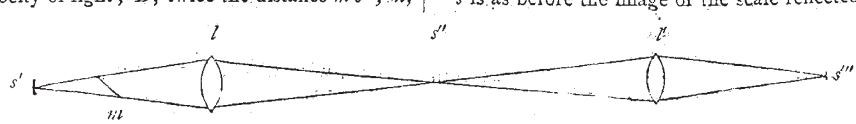
Let V be the velocity of light; D, twice the distance ms''; n, the number of turns per second, and r the distance ms; then, calling δ the deflection, V is found from the formula—

$$V = \frac{4\pi r n D}{\delta}.$$

In a preliminary experiment the deflection amounted to five millimetres when the mirror revolved 128 times per second.

The following is another plan which would probably give more light than the above.

s is as before the image of the scale reflected in the mirror m;



its image would be formed at s'' by the lens l, and the image of s'' would be formed at s''', where the plane mirror is placed. In this case also, the rays are reflected back, so that the scale and its image coincide notwithstanding the (slow) rotation of m. ALBERT A. MICHELSON

U.S. Naval Academy, Annapolis, Maryland

University College

THE fiftieth anniversary of the opening of University College falls within this year. It is intended to celebrate the occasion by a gathering of members of the corporation, present and past, professors and masters, old students of the college and school, and other friends and benefactors of the institution, to be held within the precincts of the college, on Tuesday, July 9, at 1 o'clock P.M. The Right Hon. Earl Granville, K.G., Chancellor of the University of London, has kindly accepted the invitation of the President, Council, and Senate to attend and lay the first stone of a further extension of the college buildings and preside at the luncheon; and the presence is expected of many other persons of distinction interested in the welfare of the college and in the promotion of University education.

The space at the disposal of the college, even since the school has been entirely withdrawn to the south wing, is far from adequate to the rapidly increasing requirements of modern education. The Fine Art Department has been obliged to refuse pupils. The Council has, moreover, after prolonged experience