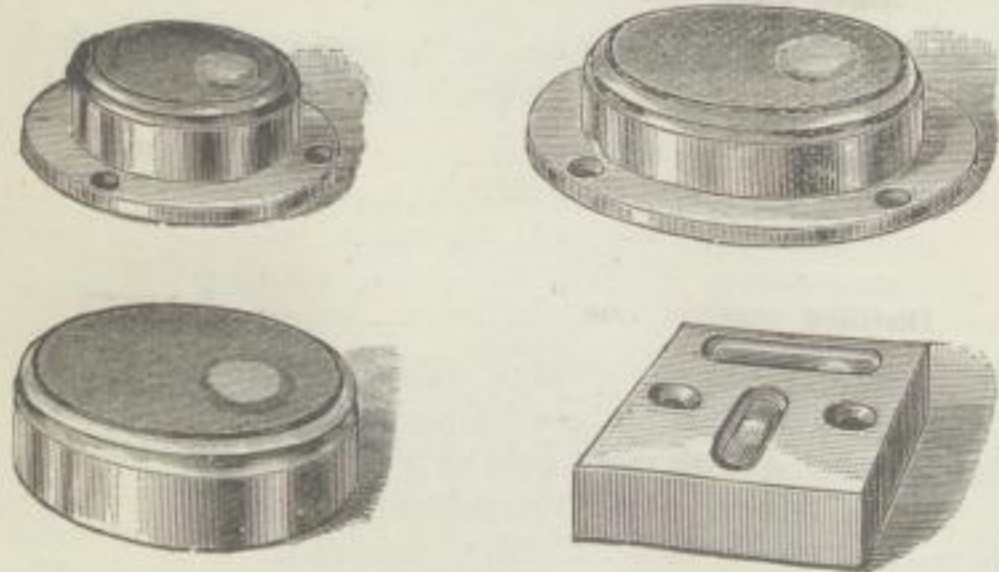


to one side or the other can easily be detected by "sighting" down one side of the camera back along with any vertical line in the building that is being photographed. Moreover, the effects of mere "side tipping" of the camera can always be corrected afterwards by sacrificing a little of the margins of the prints, trimming parallel with and at right-angles to vertical lines.

Moreover, two levels at right-angles to each other, or a circular level, which serves the same purpose, is used.



Subjoined are illustrations of levels for cameras as manufactured by Messrs. Taylor, Taylor, and Hobson. Another arrangement is to have a small brass plummet suspended at one side of the back, as will be seen in the cut, page 1001, December 26th, 1890.

Some photographers prefer to carry in their pockets a bullet, or other light weight, hung on a piece of thin string, and to hold this in the hand as a plummet. It may be worth while remembering that, if a knot be made at a distance of thirty-nine inches from the weight, and the weight and string be swung as a pendulum from the knot, each single swing will be practically a second. If the length be ten inches, it will be half a second.

So far as side tilting of the camera goes, it is often possible to avoid this by "sighting" any vertical line in the subject in front, and one side of the back of the camera.

THE ENFIELD CAMERA CLUB.—At the meeting on the 18th inst. five new members were elected.

ROYAL INSTITUTION.—Professor C. Meymott Tidy will on Thursday next (March 5th) begin a course of three lectures on "Modern Chemistry in Relation to Sanitation."

PORTRAITURE.—In a reprint, from *Poet-Lore*, of a paper read before the Melbourne Shakespeare Society on "Shakespeare's Face," the following remarks occur:—"If there is one thing more productive of utter despair than another, it is an attempt to reconcile the conflicting opinions provoked by portraiture. No two artists will give portraits of one individual that absolutely agree; no two critics will agree about their relative merits as likenesses, and ordinary people comparing portraits with faces invariably differ with varying degrees of disagreement."

THE PHOTOGRAPHIC CLUB.—This Club has issued a pamphlet, compiled by Mr. Mackie, about its early history. It was indirectly founded in 1879 by Mr. Arthur Brittlebank; the first meeting was held at his studio, 3A, Tottenham Court Road, London, on June 18th of that year. The Brittlebank meetings soon came to an end, but their advantages were so fully recognised that some of those who took part in them founded the Photographic Club. The foundation meeting was held November 7th, 1879, at the Freemasons' Tavern, with Mr. Jabez Hughes in the chair. The Club has just issued its annual report and balance sheet. The Club now holds its meetings every Wednesday evening at Anderton's Hotel, Fleet Street, London.

LANTERN SLIDES.

BY F. GOLDBY.

DURING this exceptionally dull and inclement winter, out-door photography has been next to impracticable, and no doubt many amateurs have—as I have—devoted the greater part of their spare time to lantern work; so possibly the following notes, though they may contain nothing new to more experienced workers, may perhaps prove of some interest and use to those who, like myself, are beginners in this most fascinating branch of photography.

During a short holiday spent in Switzerland last August, I obtained some five dozen half-plate negatives of scenery in the Bernese Oberland, and from these and others taken nearer home I have been engaged in spare time for the last two months in making slides. In order to reduce from these half-plates to lantern size, I employed at first two cameras—my ordinary half-plate to take the negative in one of the double backs, and a smaller camera with lantern plate carrier and rectilinear lens; the lens of the latter being inserted in the lens aperture in the front of the former. But the two necessary adjustments for placing the image rightly upon the lantern plate, and at the same time focussing, proved so troublesome that I soon gave it up, and invested in one of the fixed focus reducing cameras now sold at a very low price by all photographic dealers. This last is provided with a single lens, which gives practically straight lines upon the lantern plate, and I have found it most convenient and useful.

One caution is, however, very necessary in using such a camera, viz., to take great care that no light enters during exposure except through the negative. I find it even necessary to mask the edges of the negative, and this is best done by pasting a narrow strip of black or orange paper on each side of the negative at the back, well covering the blank margins, and allowing the paper to overlap about an eighth of an inch, so that the pieces of thick cardboard used for filling up the side spaces may be pushed under the overlapping paper. If this be not carefully done, a marked difference in the brilliancy of the slide will be perceptible, and there will be a constant tendency to "veil." Most of my negatives are on celluloid, but the difficulty of getting these to lie flat was easily overcome by slightly widening the grooves at back of the reducing camera, so that they would admit the film between two thin plain glass plates.

The lantern plates I have been using have been chiefly gelatino-bromide, the chloride plates being tediously slow for printing in the camera with such a light as has been available for some months past; and at times, even with the bromide plates, I have found it much more convenient to use magnesium ribbon than to trust to the uncertain daylight, and have obtained very good results upon plates so exposed. The quantity required was from one to four or more feet, according to the density of the negative and the tone required.

As regards the development of lantern slides, there is no doubt that hydrokinone is the easiest and cleanest developer in working, and has least tendency to give fog; but for my own part I much prefer pyrogallol, as the warm tones it gives with full exposures are to me so much more pleasing than the cold blacks of the hydrokinone-developed slides.

In working with the pyro developer, a large proportion of bromide is necessary. The average developer