

THE CAMERA AND ITS VARIOUS MOTIONS.

BY PROFESSOR W. K. BURTON, C.E.

CHAPTER IV.—THE TRIPOD-STAND, TURNABLES, ETC.

IN spite of the great amount of ingenuity that has been spent on camera stands, I think it is generally felt that the ideal stand has yet to be invented, or perhaps that it is impossible to fulfil all the qualities demanded. A few of these are strength, rigidity, lightness, portability, great height, accompanied with the capacity to shorten each of the three legs independently, capability of being instantly erected, and durability—a nice little list for the enterprising inventor!

It would be out of the question to attempt to enumerate, much less to describe, all the various tripods that have been designed with a view to fulfilling as many of the conditions as possible, and all succeeding more or less. Only a few words on the several conditions can be allowed.

As regards strength and rigidity, it should always be remembered that they are not, by any means, the same thing. To take a definite example: There has probably never been a stand invented that combined so much rigidity with lightness as the "Alpen Stock" stand, invented some years ago by Mr. George Smith. So stiff was this that, although intended only for a small camera, I used the stand for a somewhat heavy 12 by 10. The stand was rigid enough; in fact, it was more rigid than any stand that I have used since, and did very well till an attempt was made to lift about the camera with it, when it simply collapsed! It is fair here to remind the reader that the stand was not intended for a heavy camera. Lightness is compatible with stiffness, but not, apparently, with strength. If one has a heavy camera he must submit to a heavy stand; at least, if he wants to be able to pull about the camera, already erected, with any degree of ease.

It is almost impossible to have a really stiff stand with a very small top; and, moreover, it is an advantage, in every case, to have a comparatively large top, as this increases greatly the stiffness of the base-board, a thing of great importance in the case of some of the lighter makes of modern cameras.

Lack of rigidity in the stand itself should not be confused with "shakiness" of the camera itself on the top

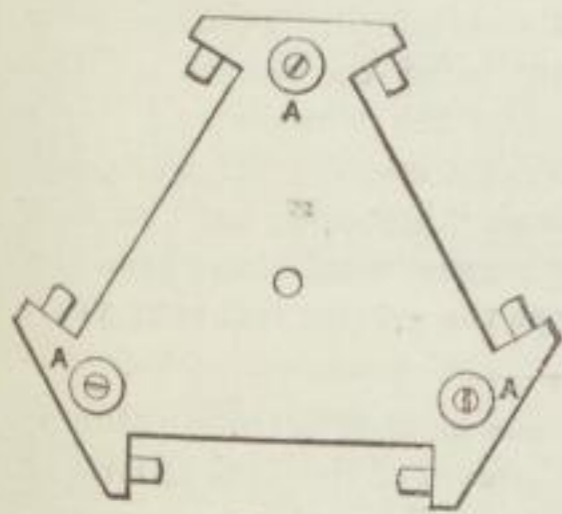


Fig. 10.

of the stand. This latter fault is a very general one, and especially in the case of stands with wooden tops or triangles. It arises, of course, from either convexness or springing of either the top of the stand or the base-board of the camera. It may be useful to know that it may always be cured by fixing the leather pads on the camera top, so that the camera will actually rest on three points. I illustrate the way in which this may be done in the case of a wooden triangle and a metal tripod top. In each case A A A are small pads of leather.

It should be understood that more rigidity is given by three pads than by four or any other number, and much more than by covering the tripod top altogether with

leather. The pads may be fixed with screws, screwed down till the heads have sunk into the leather.

One word in connection with the use of a tripod-head with the three pads just described. Caution must be used in tightening the screw, otherwise the base-board may be split.

Turntables.—The turntable, as applied to cameras, was one of the improvements first popularised by McKellen. The arrangement is illustrated here. It may be said to consist of a turned circular top revolving in a bored ring. It gives great steadiness, and the camera may be clamped tightly in any position by a screw.

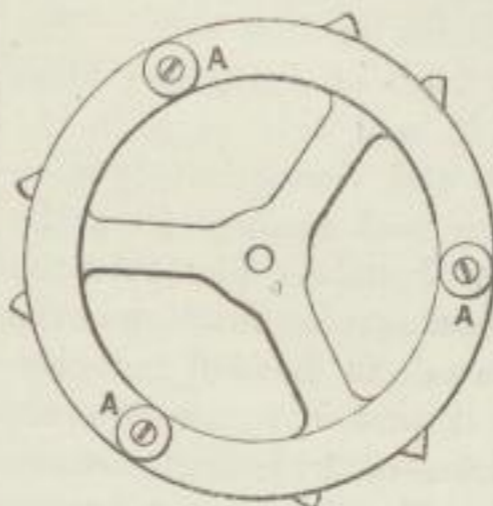


Fig. 11.

Telescopic Metal Stands, Walking-Stick Stands, &c.—I have not had much experience of these, but I know that there are several forms of them that are light and convenient, and that are stiff enough for very small cameras.

THE SOCIETY OF AMATEUR PHOTOGRAPHERS OF NEW YORK.—The Society of Amateur Photographers of New York is incorporated under the laws of the State of New York for the cultivation and promotion of the science and art of photography. In carrying out these objects, the Society has provided itself with convenient quarters, consisting of a club room, well supplied with photographic literature, and all the leading periodicals of this country and Europe; commodious dark rooms fully supplied with all necessary utensils and chemicals, and convenient lockers for the storing of personal effects; and a large hall for meetings, exhibitions, etc. It also possesses complete sets of apparatus for printing, making enlargements and lantern slides by electric light, with all facilities for operating the same.

DISTINGUISHED AMATEUR PHOTOGRAPHERS.—To the already long list of distinguished amateur photographers, says an evening paper, may be added the Princesses Maud and Victoria of Wales, who are thus able to return the compliment so constantly paid to them at public ceremonies. The Prince of Wales sometimes seems to be determined to avert his gaze from the camera of the ever-present photographer at a railway station or a stone-laying function. Four members of Parliament are well known as energetic and successful amateur photographers. Sir Richard Webster, Q.C., M.P., indulges in the art as a relief to the duties of an Attorney-General; Mr. Cyril Flower, the handsome representative of Luton in Parliament, has many negatives of Mr. Gladstone—the result of a visit paid by the right hon. gentlemen to Ashton Clinton; Sir A. K. Rollit, M.P., has dabbled in photography to a modest extent; while Mr. Patrick O'Brien, M.P., is, of course, famous for his doings at Tipperary and elsewhere. Mr. George Wyndham, M.P., tried his hand at rivalling Mr. O'Brien on his recent visit to some of the distressed portions of Ireland. Gustave Eiffel, who, like the Balbus of our Latin grammars, "built a tower," is an amateur photographer as well as an engineer. Mr. H. H. Johnston, the explorer, knows the dark room as well as the dark places of Africa. Another explorer, Nanssen, whose book so many are reading, is also a photographer of high ability. Miss Alice Longfellow, the daughter of the poet, practises the "gentle art;" and Mr. W. T. Stead did not disdain a detective camera at Oberammergau, although he was soon compelled to refrain from taking "snap shots" of the Passion play. The late Archbishop of York was an ardent photographer. For a long while before the present craze for this pleasing hobby, his Grace had taken a deep interest in the Dry Plate Club. Of the Amateur Photographic Association Dr. Thomson was a vice-president for many years. The various publications relating to photography—so numerous at the present day—were read by the Archbishop with keen enjoyment.