

(No Model.)

H. SWAIN.
PHOTOGRAPHIC CAMERA.

No. 384,940.

Patented June 19, 1888.

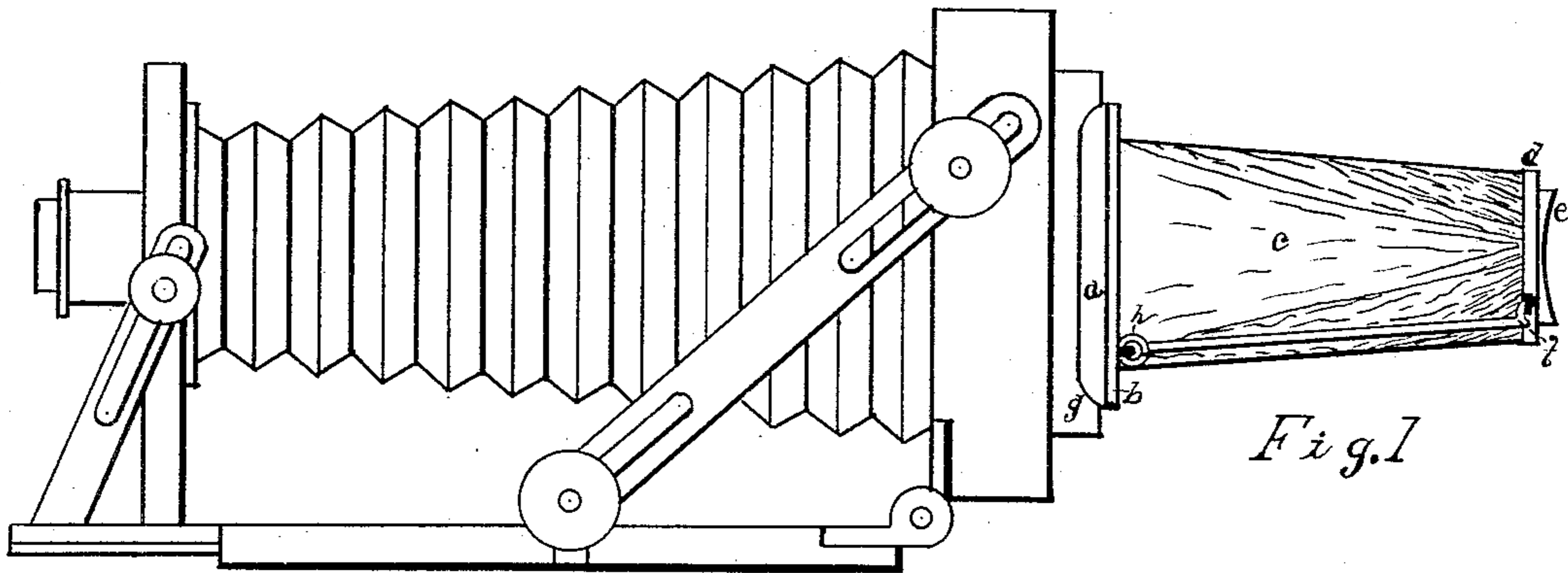


Fig. 1

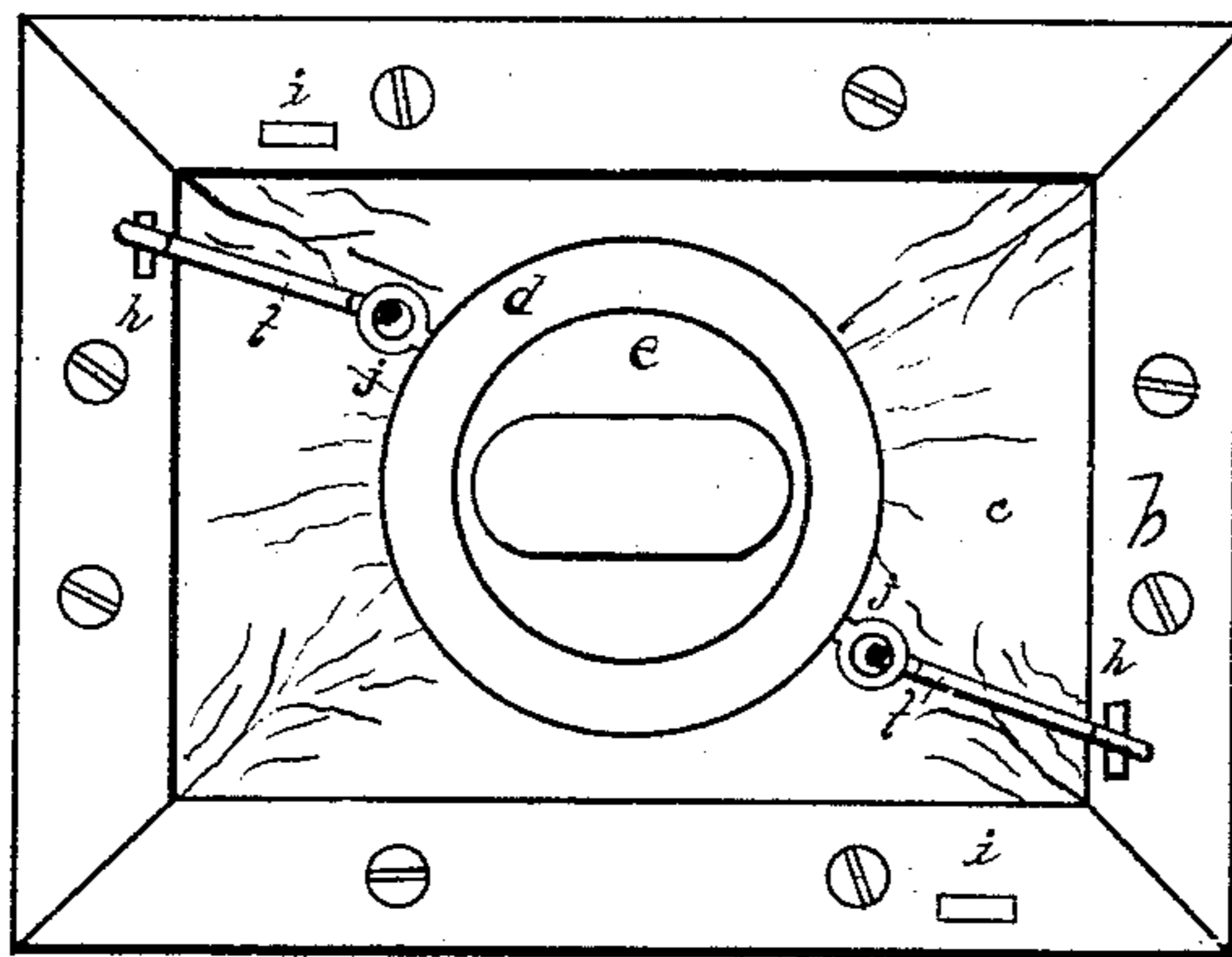


Fig. 2

Fig. 4

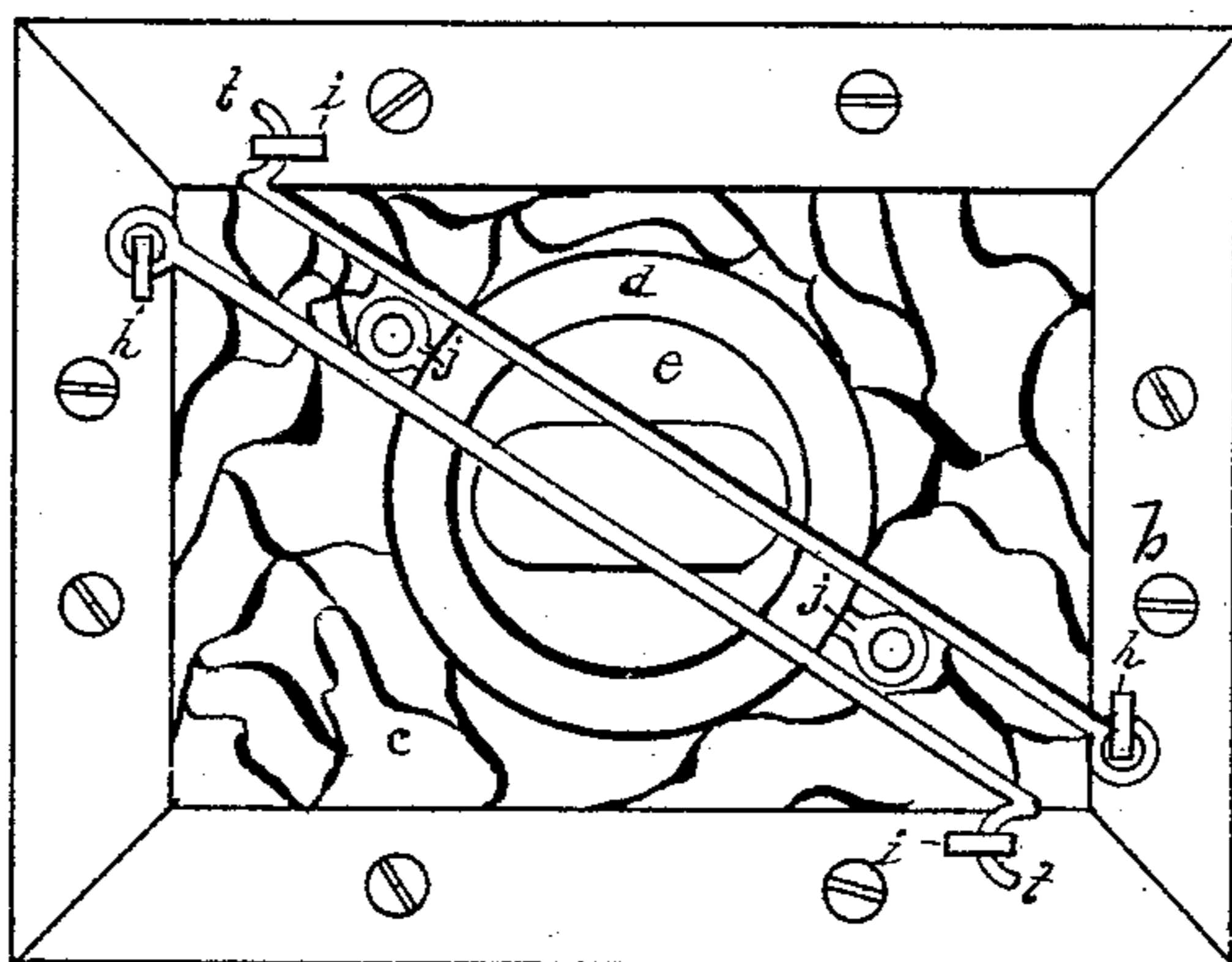
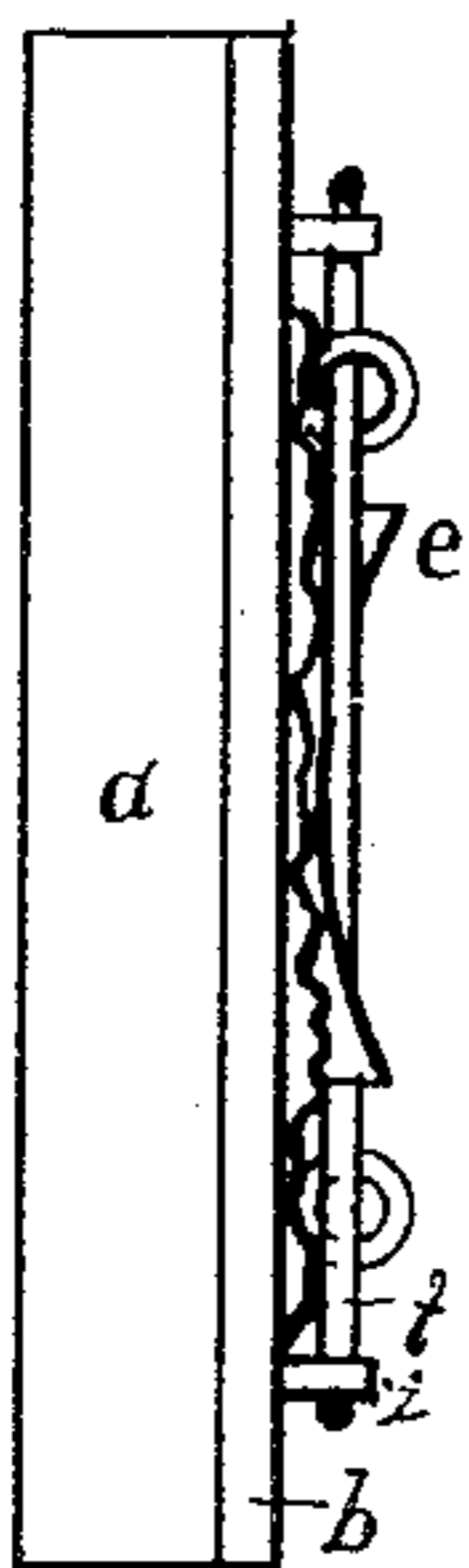


Fig. 3

Fig. 5



Witnesses:
Chas. E. Perkins
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UNITED STATES PATENT OFFICE.

HADWEN SWAIN, OF SAN FRANCISCO, CALIFORNIA.

PHOTOGRAPHIC CAMERA.

SPECIFICATION forming part of Letters Patent No. 384,940, dated June 19, 1888.

Application filed March 10, 1888. Serial No. 266,907. (No model.)

To all whom it may concern:

Be it known that I, HADWEN SWAIN, a citizen of the United States of America, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Photographic Cameras, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The object of this invention is to do away with the loose cloth usually used by photographers to put over their heads, and to substitute therefor an arrangement which will hold itself in place.

15 In reference to the drawings, Figure 1 represents a side view of the focusing device attached to a camera. Fig. 2 is a rear view showing cloth stretched out; Fig. 3, the same with cloth folded up; Fig. 4, edge view of the latter; Fig. 5, section of eye-piece.

20 This device consists of a main frame, *a* and *b*, a tube of rubber cloth or other suitable material, *c*, together with an eye-piece and rods to hold in place.

25 The main frame *a* is made of wood or other light material, and is fitted to the ground-glass holder. It is screwed or otherwise fastened to the latter. The cloth is fastened around the face of *a*, and *b* is then screwed down to hold the edge of the cloth and make a neat appearance. The cloth is then sewed together, so as to form a tube or sack. The open end of the sack is then secured to the ring *d* by winding string or wire around the groove provided in the latter. The ring *d* is recessed out on the inside to form a shoulder for the eye-piece *e* to rest against, and has small strips of sheet-brass placed on the inside to prevent *e* from falling out, while it is free to revolve.

35 Eye-hooks *j j* are placed on opposite sides of *d*. The rods *f f* are hooked on each side of the main frame *a* by the eyes *h h*. When these rods are hooked into *j j*, they hold the cloth

tube out straight and the operator can look through the eye-piece *e* into the ground glass. 45 By unhooking from *j j* and hooking into eyes *i i*, provided on *a*, the cloth and ring *d* are all flattened down into *a* and *b* and securely held there.

The object of having the eye-piece *e* revolve in *d* is for the purpose of keeping the slot in the latter always in a horizontal position for the eyes whether the ground-glass is placed on end or edgewise. This slot is only cut out of *e* just large enough so both eyes can look 55 into the tube without admitting any more light than possible.

Having thus described my invention, what I desire to secure by Letters Patent and claim is as follows: 60

1. The camera provided with the bellows and lens, in combination with the cloth tube *c* and an adjustable eye-piece provided with the elongated opening secured thereto, substantially as and for the purpose set forth. 65

2. The camera provided with the bellows and lens, in combination with the cloth tube *c*, having the ring *d* connected thereto, and the adjustable eye-piece provided with the elongated opening mounted in the ring, substantially as described. 70

3. The combination, with the camera provided with the bellows and lens, of the cloth tube *c*, having the ring *d*, and the stretching-rods *f f*, secured to the main camera-box and adapted to engage eyes in the ring *d*, substantially as and for the purpose set forth. 75

4. A cloth tube, *c*, in combination with main frame *a*, stretching-rods *f f*, ring *d*, and eye-piece *e*, substantially as described. 80

In testimony whereof I affix my signature in presence of two witnesses.

HADWEN SWAIN.

Witnesses:

CHAS. E. PERKINS,
R. J. ROLFSON.