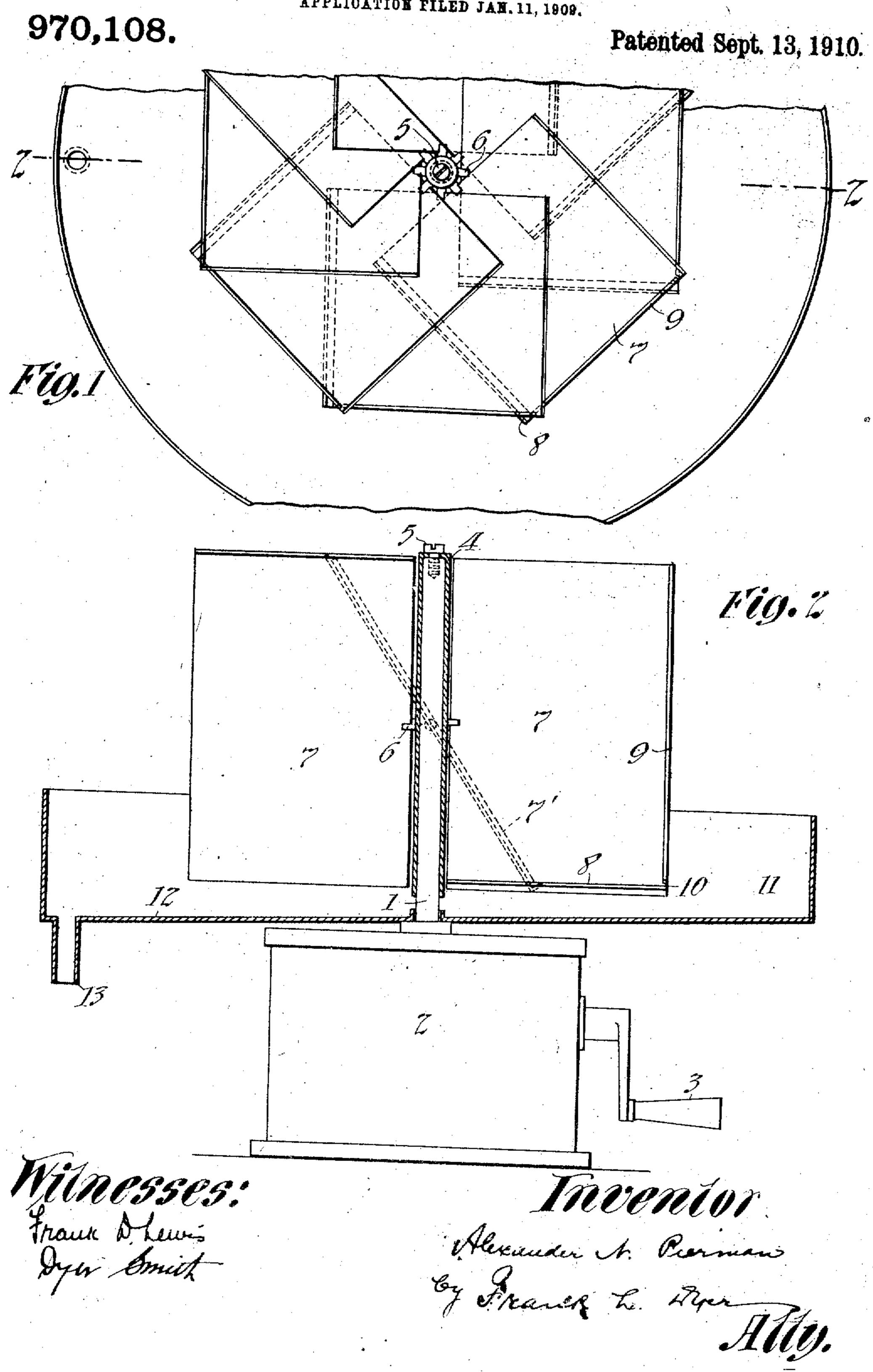
A. N. PIERMAN.

DRYING RACK FOR PHOTOGRAPHIC PLATES.

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## UNITED STATES PATENT OFFICE.

ALEXANDER N. PIERMAN, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF TO FRANK L. DYER, OF MONTCLAIR, NEW JERSEY.

## DRYING-RACK FOR PHOTOGRAPHIC PLATES.

970,108.

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To all whom it may concern:

Be it known that I, ALEXANDER N. PIER-MAN, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have made a certain new and useful Invention in Drying-Racks for Photographic Plates, of which

the following is a description.

My invention relates to apparatus for drying photographic plates and its object is to
provide means whereby photographic plates,
after having been developed, fixed and
washed, may be easily and quickly dried.
After washing, the drying of a photographic
plate is often a very tedious and slow matter. Accordingly, I provide a rack comprising a series of holders in which the
photographic plates can be readily placed,
the said holders being rapidly revolved by a
spring motor or other convenient means,
whereby the water adhering to the film on
the plates is thrown off by centrifugal force
and the plates quickly dried.
Other objects of my invention are to pro-

Other objects of my invention are to provide improved details of construction as described in the following specification and particularly pointed out in the claims.

Attention is hereby called to the accompanying drawings forming part of this

30 specification, in which—

Figure 1 represents a partial plan view of my improved apparatus, and Fig. 2 represents a vertical cross section of the same

taken on line 2-2 of Fig. 1.

As shown in the drawings, a vertical shaft 1 is provided, which shaft is supported in and extends above a box or case 2 in which any suitable motor (not shown) for revolving the same may be placed. This motor is 40 preferably a spring motor, but any convenient form may be used. As shown in the drawings, the handle 3 is provided for winding the spring motor which is supposed to be contained in the box 2. The 45 rack for holding the plates to be dried may be fastened to the vertical shaft 1 in any convenient manner. In the form shown in the drawings, a sleeve 4 is secured to the shaft 1 as by means of the set screw 5. The 50 sleeve 4 is provided with a series of lugs 6 arranged radially around it. These lugs 6 are bifurcated to embrace the plate holders 7 which may be soldered in place between the forks of the lugs 6. It is to be under-55 stood that the plate holders 7 may be se-

cured to the lugs 6 in any other convenient manner, and also that the sleeve 4 might be dispensed with if desired, the plate holders being secured directly to the shaft 1. The form disclosed is thought preferable, how- 60 ever, in order that the various parts may be the more easily removable. The plate holders 7 are preferably disposed at an angle to the vertical shaft 1, as indicated in Fig. 2 of the drawings by the plate holder 7', 65 which is shown in dotted lines, the same being understood to be situated in a plane lying at right angles to the surface of the drawing. The axes about which the various plate holders are inclined, as described, are 70 radially disposed about the shaft 1, and are continuations of the lugs 6 thereon. The plate holders 7 are preferably sheet metal plates having a lower edge 8 and an outer edge 9, and each of the same bend upwardly 75 and forwardly respectively to form bearing surfaces for the plates and to prevent the plates from being thrown off by centrifugal action in the rotation of the holders. A channel or passage 10 is provided in the 80 lower outer corner of each plate holder for the passage of whatever water on the plates is thrown off by the centrifugal action, and this passageway 10 may be provided, as shown, by cutting away the flange 9 a short 85 distance from its junction with the lower flange 8. A trough or tank 11 is provided beneath the rotary plate holder to catch whatever water is thrown off. The bottom 12 of this tank or trough is inclined as 90 shown toward the spout 13, from which the water contained in the receptacle 11 may be allowed to drip into any convenient receptacle.

In operation, the plates to be dried are 95 placed on the plate holders 7 with the glass side of the plates against the surface of the holder, the film side of the plates being exposed to the action of the air as the rack is revolved. Owing to the inclination at 100 which the plates are preferably disposed, the air passes freely over the surface of the plates in their revolution, drying the same while the centrifugal action caused by the revolution of the plates tends to throw off 105 the drops of water from the film. It is to be noted that owing to the inclination of the plates, the air is caused to circulate over the film surface of the plates during their revolution in much the same manner as air 110

passes over the surface of a revolving fan blade. It is, however, to be understood that the plates might be disposed vertically although, as stated, I prefer to incline them at 5 an angle, as shown.

Having now described my invention, what I claim and desire to secure by Letters Patent of the United States is as follows:

1. In a drying rack, in combination, a 10 shaft, a plurality of plate holders radially disposed about and secured to said shaft. and means for revolving said shaft, substantially as described.

2. In a drying rack, in combination, a 15 revoluble shaft and a plate holder comprising a flat plate disposed radially to said shaft and secured thereto at one edge, sub-

stantially as described.

3. In a drying rack, in combination, a 20 revoluble support, a plate holder mounted on said support, and means supporting said holder at an inclination to the axis of said support, the axis to which said holder is inclined intersecting the axis of said sup-

25 port, substantially as described.

4. In a drying rack, in combination, a revoluble support, a plate holder, comprising a flat plate, mounted on said support, and means supporting said holder at an in-30 clination to the axis of said support, an element of said holder intersecting the axis of said support, said holder being provided with means for retaining a photographic plate thereon, substantially as described.

35 5. In a drying rack, in combination, a shaft, a plurality of plate holders each in-

clined at an angle to the axis of said shaft, the axes about which the said holders are inclined being radially disposed to the said shaft, and means for securing said holders 40 to the said shaft, substantially as described.

6. In a drying rack, in combination, a shaft, a plurality of plate holders each inclined at an angle to the axis of said shaft, the axes about which the said holders are 45 inclined being radially disposed to the said shaft, means for securing said holders to the said shaft, and means for revolving said shaft, substantially as described.

7. In a drying rack, in combination, a 50 revoluble support, a plate holder mounted radially on said support and consisting of a flat plate having the lower and outer edges bent upwardly and forwardly respectively to hold a plate, and means for revolving said 55

support, substantially as described.

8. In a drying rack, in combination, a revoluble support, a plate holder mounted radially on said support and consisting of a flat plate having the lower and outer edges 60 bent upwardly and forwardly respectively to hold a plate, said outer edge being so formed at its lower end as to provide a passage for fluid thrown off centrifugally, and means for revolving said support, substan- 65 tially as described.

This specification signed and witnessed

this 7th day of January 1909.

ALEXANDER N. PIERMAN.

Witnesses:

DYER SMITH, ANNA R. KLEHM.