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PACK CARRIER.

APPLICATION FILED AUG. 11, 1919.

1,362,136. Patented Dec. 14, 1920.

Fig. 1.

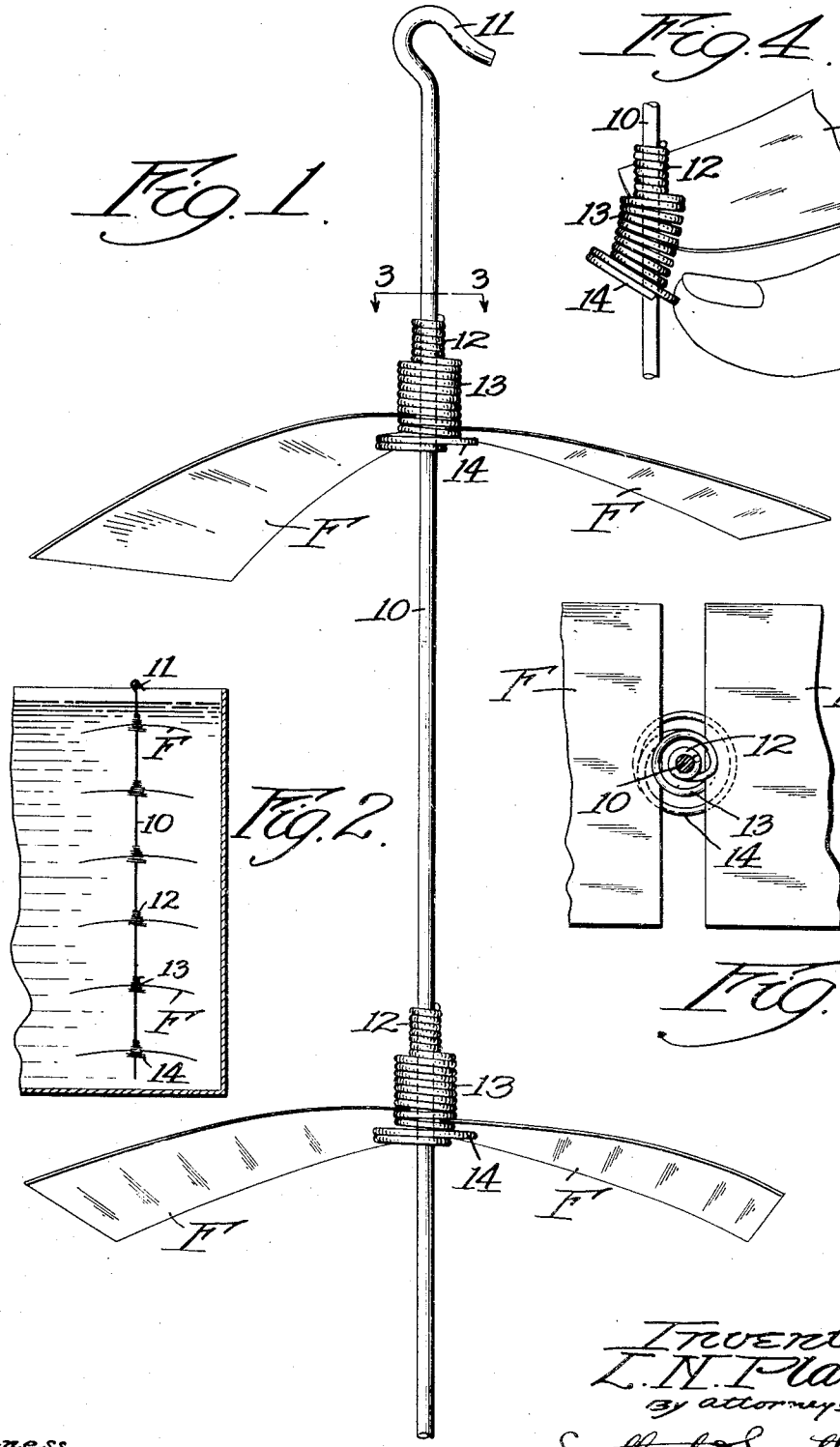


Fig. 4.

Fig. 2.

Fig. 3.

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PACK-CARRIER.

1,362,136. Specification of Letters Patent. Patented Dec. 14, 1920.

Application filed August 11, 1919. Serial No. 316,570.

To all whom it may concern:

Be it known that I, LEVI N. PLANTE, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Pack-Carrier, of which the following is a specification.

This invention relates to a pack carrier as it is called, that is, a device for holding a pack of films while being treated chemically or dried. But it can be used for other purposes such as holding papers, postal cards, or the like for exposure for sale, etc.

The principal objects of the invention are to provide a simple, inexpensive and practicable support into which the films, cards, or the like can be placed in a minimum of time and with practically no danger of injuring them. It involves a rod or support adapted to depend from above and provided with a plurality of devices for holding the articles, preferably enough to carry a pack of twelve films. These holding devices are so constructed that a film can be forced into them edgewise with no danger of damaging it and without opening any pivoted jaws or otherwise manipulating the parts.

Reference is to be had to the accompanying drawings, in which

Figure 1 is a side view of a preferred form of the invention, showing it as holding a pack of films, only four of which are shown;

Fig. 2 is a similar view showing the whole device on a smaller scale in use in a developing tank, shown in section;

Fig. 3 is a horizontal section on the line 3—3 of Fig. 1 showing the holding device in plan, and

Fig. 4 is a side view of one of the film holders showing how the film is inserted.

In the form shown, a rod 10 is provided having a supporting hook 11 at the top for holding it suspended as shown in Fig. 2 in a developing tank or in a shop display window. The rod hangs down in the tank and all the articles carried by it can be immersed or taken out very easily. Afterward the whole pack can be carried to a place to be washed and then hung up to dry without disturbing their position on the carrier.

The holding devices shown are each formed of a single piece of wire. Each one has a small coiled part 12 at the top by which it is secured as by solder, to the rod throughout its own length. The coil is then widened so as to form a larger coil 13 integral with the small one. The coils of this part are free so that a film F or other thin sheet can be inserted without trouble and one can conveniently be located on each side without danger of their interfering with each other.

I have also shown the wire as provided with a still further enlargement or coil 14 at the lower end of the holding coil 13 and integral therewith. This projects out beyond the circumference of the holding coil all around so that it can serve as a handle for tilting the lower edge down and separating the coils 13 on one side to admit the edge of the film as shown in Fig. 4. In this way the insertion of a delicate film or sheet becomes a simple and safe operation. Yet as soon as the pressure is removed the central coils spring together naturally and hold the film tightly, but at the same time they can be removed without an action except to exert a slight pull on them.

This constitutes a very simple device that is durable and efficient and not likely to get out of order. As the film gripping coils, as well as the operating coil 14, extend all the way around the rod and are freely spaced therefrom all around, the films can be put in place at any point around the circle.

Although I have shown and described only one form of the invention and described it as used for one purpose only, I am aware of the fact that changes and modifications can be made therein by those skilled in the art, without departing from the scope of the invention as expressed in the claims, therefore, I do not wish to be limited to the details herein described, but what I do claim is:

1. As an article of manufacture, a film pack carrier comprising a depending rod having at intervals thereon coiled members surrounding it and adapted to hold a film on each side of said rod.

2. As an article of manufacture, a film pack carrier having a supporting rod and holding devices thereon of continuous yielding material adapted to be opened on either side of the rod to admit the edge of a film or the like.

3. A carrying device comprising a vertical rod and a coiled spring thereon fixed to the rod at the top and free at the bottom and surrounding it.

4. An article of the class described, comprising a support, and a coiled member thereon having at one end a small coil secured to the support throughout its length and an in-

tegral larger coil spaced from the support to hold the edges of articles in sheet form.

5. An article of the class described, comprising a support, and a coiled member thereon having at one end a small coil secured to the support throughout its length and an integral larger coil spaced from the support to hold the edges of articles in sheet form, and provided with a still larger integral coil at its free end for use in opening the coils of the intermediate coil.

6. A carrying device comprising a vertical rod and a coiled spring thereon fixed to the rod at the top and free at the bottom, and having a projection at the bottom for use in opening the coils.

7. A carrier of the class described, comprising a rod and a series of holders thereon, each surrounding the rod and spaced therefrom all around.

In testimony whereof I have hereunto affixed my signature.

LEVI N. PLANTE.