

(No Model.)

2 Sheets—Sheet 1.

M. P. C. HOOPER.
WORK HOLDER.

No. 517,860.

Patented Apr. 10, 1894.

Fig. 1.

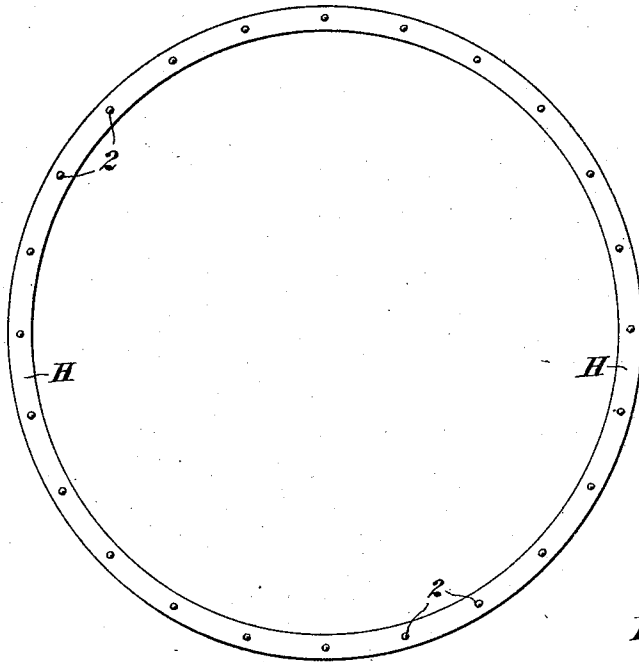


Fig. 3.

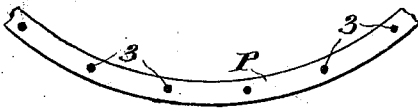


Fig. 5.

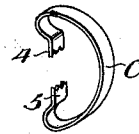


Fig. 2.

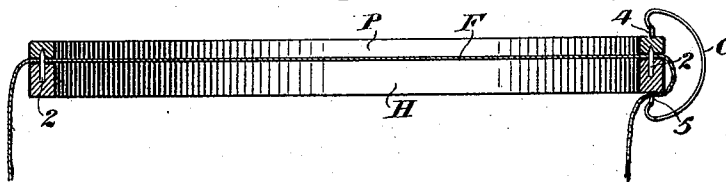
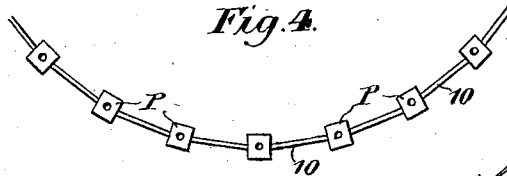


Fig. 4.



Witnesses:

Edward Thorpe

J. M. Boret

Inventor:

Mary P. C. Hooper
By
Shepp, Munson & Phelps
Attys.

(No Model.)

2 Sheets—Sheet 2.

M. P. C. HOOPER.
WORK HOLDER.

No. 517,860.

Patented Apr. 10, 1894.

Fig. 6.

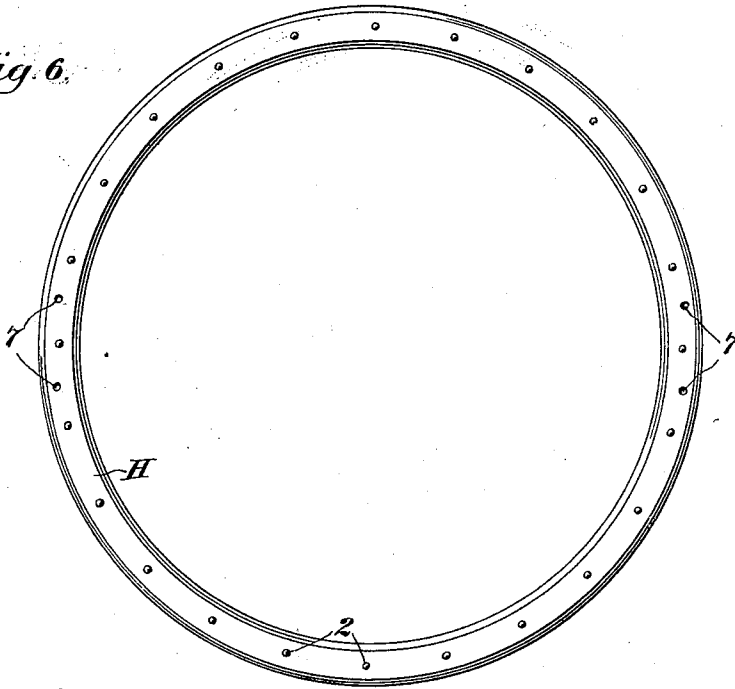


Fig. 7.

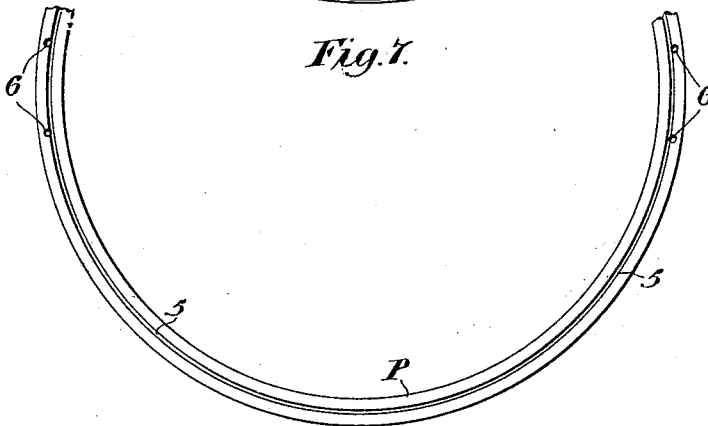
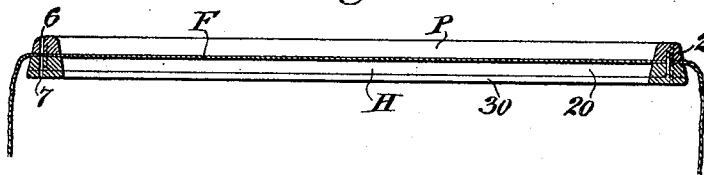


Fig. 8.



Witnesses:

Edward Thorpe.

J. M. Borst

Inventor.

Mary P. C. Hooper

By

Philip Munson & Phelps

Att'ys.

UNITED STATES PATENT OFFICE.

MARY P. C. HOOPER, OF NEW YORK, N. Y.

WORK-HOLDER.

SPECIFICATION forming part of Letters Patent No. 517,860, dated April 10, 1894.

Application filed May 2, 1893. Serial No. 472,802. (No model.)

To all whom it may concern:

Be it known that I, MARY P. CARPENTER HOOPER, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented certain new and useful Improvements in Work-Holders, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of the present improvements is to produce a simple and comparatively inexpensive and yet make a strong and effective holder for stretching and supporting thin fabrics or material during the operation of embroidering its surface with a stitched pattern, or otherwise ornamenting the same. In performing this operation of embroidering or ornamenting a thin material, as a textile fabric, it is essential that the same be not only stretched taut so that the complicated pattern may be worked upon it as by stitching or painting, and that this stretched condition shall be maintained for a long time, but that the fabric may be loosened or detached and be readjusted and when thus manipulated the fabric shall neither be injured nor draw and thus distort the design. Usually this is accomplished by a complicated frame having many adjustments which are not only complex in their manipulation but are liable to derangement in use whence may result in injury to the fabric or a distortion of the ornamentation or other injury thereto if it happens during the unfinished condition of the work.

The improved device made according to this invention embodies a supporting frame, providing a central working space, which frame carries a multiplicity of pins over which the fabric is to be stretched and held and having a guard or retainer for covering the pins and protecting the hands and fingers of the worker from abrasion by contact with said pins, which guard or retainer also acts to prevent the dislodgment of the stretched fabric from the pins.

In combination therewith the invention also embraces means for holding the parts together and preventing their separation in handling or using.

In the accompanying drawings illustrating the present improvements:—Figure 1 is a plan view of the main holder with the protecting retainer removed. Fig. 2 is a central sectional elevation of the holder with the protecting retainer adjusted thereon, and a retaining clamp for securing the two together adjusted at one side thereof. Fig. 3 is an under side elevation of the protecting retainer showing the pin holes therein. Fig. 4 shows an under side elevation of a modified construction of the protecting retainer. Fig. 5 is a perspective view of the clamp. Fig. 6 is a plan view of a holder. Fig. 7 is an under side plan view of the protecting retainer, and Fig. 8 is a central sectional elevation of the holder and its protecting retainer adjusted together for use.

The holder H is shown as a ring like structure having dimensions which will afford suitable strength to resist the strain to which it may be subjected. It is provided with a series of pins 2 projecting a suitable distance above its general surface and made sharp enough to enable the fabric to be entered upon them by the pins passing the meshes between its composing threads. In its use that portion of the fabric F which is stretched taut by being drawn over this holder is secured in that condition by forcing it over the pins 2, which thus hold it in all directions. In manipulating the fabric while thus supported by this holder as by drawing threads through it in the operation of embroidering or pressing upon it as in the act of painting, it follows that much strain is exerted upon the holder and hence since a circular form of the holder is the strongest disposition of the material composing it, that form is preferred, but any other conformation may be used according to the degree of strength which is possessed by the material composing it. Thus, if wood is used the circular form would be advisable, but if laminæ of wood or paper sheets or a consolidated mass of paper, celluloid or other strong compound be the material, then various other shapes may be adopted, so long as a central working space is secured.

In order to protect the fingers and hands

of the user from contact with the pointed pins 2, there is provided a protecting retainer P having a shape corresponding to that of the holder H, which retainer in one form, and especially when the material is hard and requires it, may be provided with a series of holes that are adapted in position to receive the pins 2 and this retainer fitting over the pins as in Fig. 2, forms a protecting covering which will not only present no abrading surface but additionally perform the function of preventing the fabric F from being detached from the pins 2. The holes 3 may be small enough to fit tightly upon the pins 2 and thus hold the protecting retainer P in position thereon, but in order to secure the adjusted relation of the protecting retainer P and holder H, there may be provided a clamp C (see Fig. 5) which consists of a spring body and clamping ends 4, 5, which will with spring like pressure clamp the protector and holder together, when one or more of such clamps are adjusted, as shown in Fig. 2. It is not essential that this protector should be a rigid and continuous body. It may consist of a number of pieces P, as in Fig. 4, united together by a band as 10, preferably elastic, said detached protectors P being either provided with holes adapted to snugly fit upon the pins 2 or made of some soft material into which the said pins may be pressed.

A preferable embodiment of the invention is shown in Figs. 6, 7 and 8, where the holder H is shown as composed of two parts, a body 20 with cap 30, the body 20 being provided with headed pins 2 which are entered through the body 20 so that their sharp ends will project above the same, and which pins 2 are held in place by the application to the body 20 of the cover 30 which thus confines the heads of said pins, and prevents their becoming detached. The protecting retainer P in this instance is made of some material, such as paper, which is capable of having the pins 2 entered into it by slight pressure, and while this protector may be unprovided therewith, it is preferable to form it with a slot 15 adapted to receive the ends of the pins 2 and yet bind or clamp the same so that the protector may be entered thereon with regard to its circular adjustment and held in place by friction. In this latter construction the protector may be composed of a rigid material as is obvious.

As a means for fastening the protecting retainer and holder together which is at once simple and efficient they are provided with coinciding holes 6, 7 at a suitable number of points so that when the two are adjusted together with the fabric F clamped between them, tie strings may be passed through these holes to hold them together. Thus is provided a simple, cheap, efficient and useful holder for securing in a distended condition a fabric that requires to be stretched taut when it is worked upon, either with needle

work, painting or other manipulation, which may be handled without danger of deranging or distorting the fabric, and with it the fabric may be readily arranged and readjusted, as is apparent.

The holder H is shown as rigid, and although that is the preferable embodiment of the invention, it is to be understood that a simple structure having adjustable parts when supplied with a guard or retainer will embrace the invention and be practically rigid and strong enough for some qualities or kinds of work.

What is claimed is—

1. A holder for supporting a fabric for receiving ornamentation, consisting of a frame that provides an unobstructed working space within it, which frame has a multiplicity of projecting impaling pins for retaining the fabric stretched over them, and a protecting covering retainer for the pins that is detachable for the reception and removal of the fabric, substantially as described.

2. A holder for supporting a fabric for receiving ornamentation, consisting of a frame that provides an unobstructed working space within it, which frame has a multiplicity of projecting impaling pins for retaining the fabric stretched over them, and a protecting covering retainer for the pins that is detachable for the reception and removal of the fabric and is provided with means for securing it in place over the pins, substantially as described.

3. A holder for supporting a fabric for receiving ornamentation, consisting of a frame that provides an unobstructed working space within it, which frame has a multiplicity of projecting impaling pins for retaining the fabric stretched over them, and a protecting covering retainer for the pins that is detachable for the reception and removal of the fabric that is provided with pin entering spaces of smaller area than the pins, whereby the latter operate to hold the retainer in place, substantially as described.

4. A holder for supporting a fabric for receiving ornamentation, consisting of a frame that provides an unobstructed working space within it, which frame has a multiplicity of projecting impaling pins for retaining the fabric stretched over them, and a protecting covering retainer for the pins that is detachable for the reception and removal of the fabric and composed of a material readily entered by said pins, substantially as described.

5. A holder for supporting a fabric for receiving ornamentation, consisting of a frame that provides an unobstructed working space within it, which frame has a multiplicity of projecting impaling pins for retaining the fabric stretched over them, and a protecting covering retainer for the pins that is detachable for the reception and removal of the

fabric and constructed to receive the pins within its body, said frame having holes, as 7, and said retainer having holes, as 6, which holes are adapted to receive fastenings for
5 securing the retainer upon the holder, substantially as described.

my hand in the presence of two subscribing witnesses.

MARY P. C. HOOPER.

Witnesses:

G. M. BORST,
T. F. KEHOE.

In testimony whereof I have hereunto set