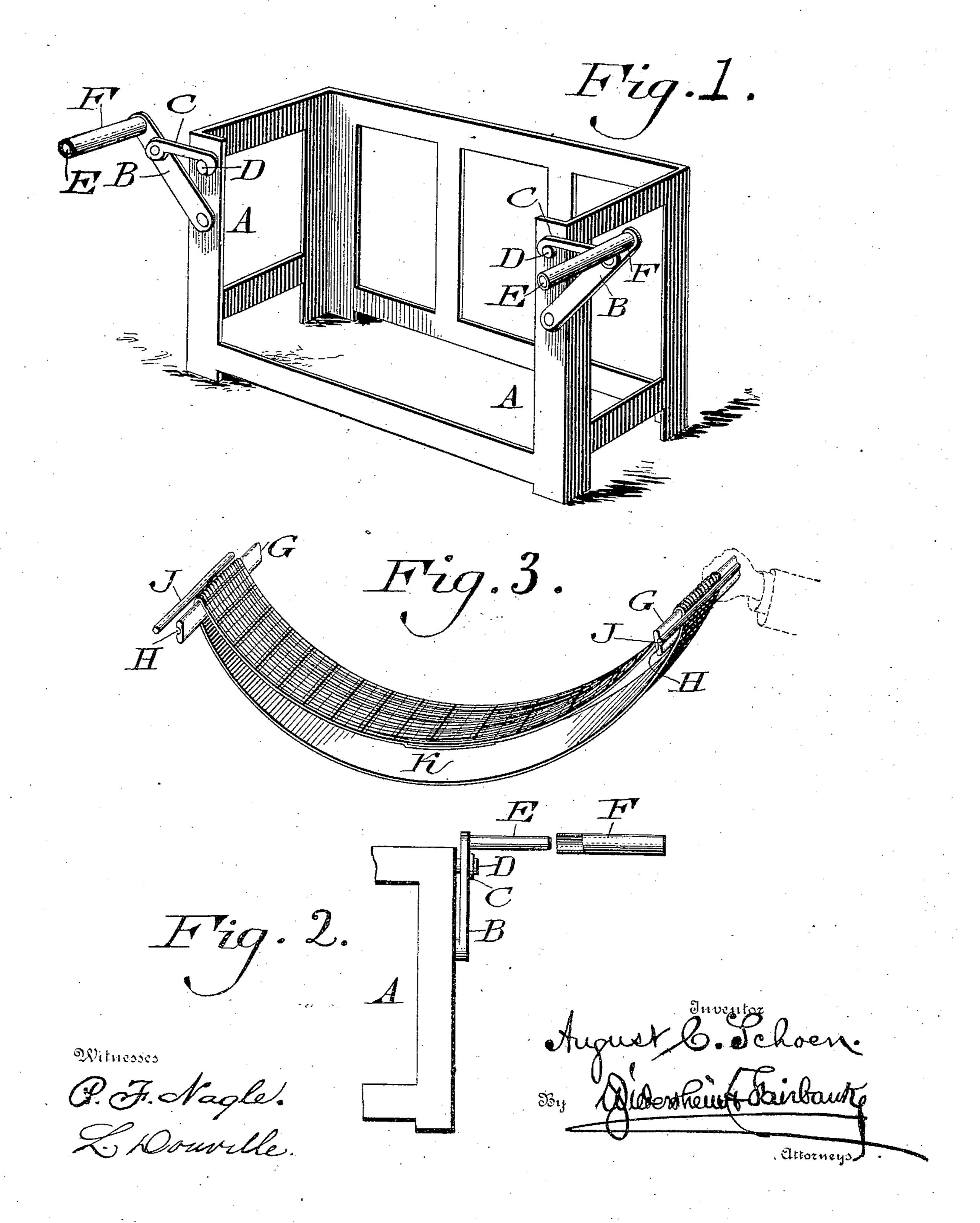
A. C. SCHOEN. WARP HOLDER OR SUSTAINER. APPLICATION FILED OCT. 26, 1906.



UNITED STATES PATENT OFFICE.

AUGUST C. SCHOEN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO STINSON BROTHERS, OF PHILADELPHIA, PENNSYLVANIA, A FIRM.

WARP HOLDER OR SUSTAINER.

No. 855,418.

Specification of Letters Patent.

Patented May 28, 1907.

Original application filed February 28, 1906, Serial No. 303,399. Divided and this application filed October 26, 1906. Serial No. 340,763.

To all whom it may concern:

Be it known that I, August C. Schoen, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Warp Holder or Sustainer, of which the following is a specification.

My invention consists of a device for holding a warp after it has been subjected to printing so that it may be tied or bound and afterward removed without liability to drag, lose its alinement, or be otherwise injured.

Figure 1 represents a perspective view of a device embodying my invention. Fig. 2 represents a side elevation of part of the same. Fig. 3 represents a perspective view of a warp in condition to be placed on the holder.

Similar letters of reference indicate corre-

20 sponding parts in the figures.

Referring to the drawings: A designates a frame, on the sides of which are pivotally mounted the arms B, which are adapted to be held in operative position by means of the latches C, which are pivotally connected with said arms, and pins or study D on the frame, said latches being adapted to engage with the heads of said pins or study. Projecting outwardly or angularly from the arms B after the manner of cranks, are the pins or limbs E, on which are adapted to be fitted the sleeves or rollers F.

G. designates bars or sticks, whose outer faces have grooves or recesses H therein, and 35 J designates rods, which are adapted to press the warps into said grooves H, as will be hereinafter more fully described. In printing a warp, the latter may be supported on a drum whose periphery is covered by material 40 such as oil cloth, the warp being wound over said material. When the printing is effected, the warp is removed and carried by suitable devices such as the sticks G and rods J to the sleeves F, upon which they are placed, when 45 the warp may be tied at intervals so that it may be subsequently removed without dragging or liability to be otherwise injured. The sleeves F act as rollers, so that the opposite ends of the warp in loop form, may be easily 50 applied thereon without strain as they turn due to the friction of the warp when con-

tacting therewith during the manipulation of hanging the warp in position, the same being true in removing the warp, the latter then being also adapted to be carried elsethen being also adapted to be carried elsethen where by said sleeves. The sleeves also prevent direct contact of the warp on the pins E and so act as sheaths, preventing oiling or soiling of the warps. When the latches C are raised, the arms B, with the pins and sleeves 60 may be dropped, and so placed in inoperative positions.

Having thus described my invention, what I claim as new and desire to secure by Let-

ters Patent, is:

1. In a warp holding device, a support, arms pivoted thereon to move toward and away from each other, means for holding said arms in operative position, and a limb extending at an angle from the outer end of 70 each arm.

2. In a warp holding device, a support, arms pivoted thereon to swing toward and from each other, a limb projecting horizontally from and at an angle to each arm with 75 their outer ends free and disconnected, and means coöperating with each arm and the support for holding each arm independently in its operative position.

3. In a warp-holding device, a support, 80 an arm pivoted thereon, a limb projecting horizontally angularly from said arm with its outer end free, a latch for holding said arm in its operative position, and a sleeve on said

4. In a warp-holding device, a support, an angular arm pivoted thereon and having its limb disposed horizontally with its outer end free, a latch for holding said arm in its operative position, and a sleeve removably 90 mounted on the outward limb of said arm.

5. In a warp holding device, a support, arms pivoted thereon to move toward and away from each other, a latch for holding each arm in operative position, a limb extending at an 95 angle from the outer end of each arm, and a sleeve removably supported on each limb.

AUGUST C. SCHOEN.

Witnesses:

E. Marsteller,

B. Dunlap.