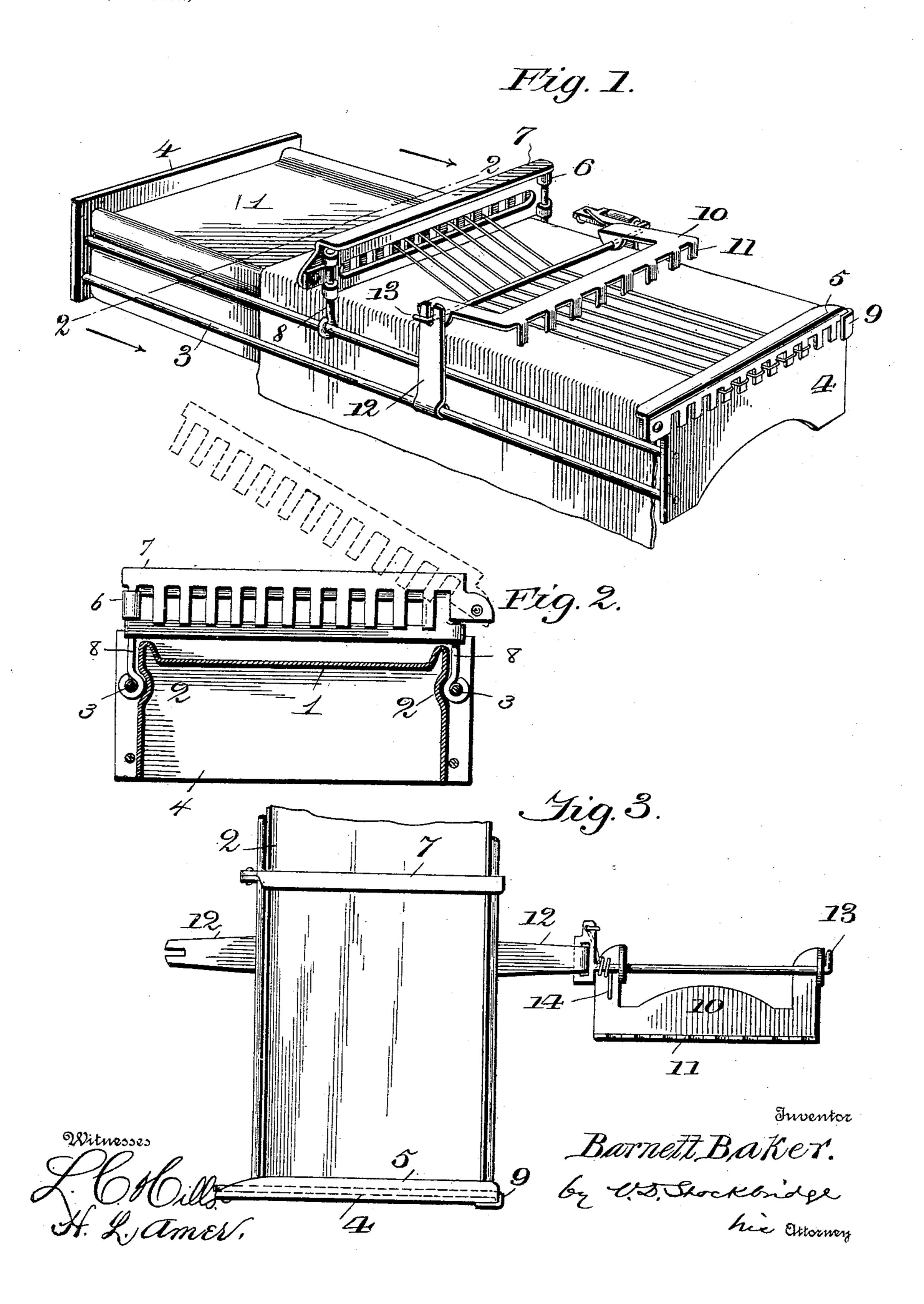
B. BAKER. DARNING APPARATUS.

(Application filed Sept. 17, 1898.)

(No Model.)



United States Patent Office.

BARNETT BAKER, OF MINNEAPOLIS, MINNESOTA.

DARNING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 620,531, dated February 28, 1899.

Application filed September 17, 1898. Serial No. 691,166. (No model.)

To all whom it may concern:

Be it known that I, BARNETT BAKER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Darning Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to darning apparatus, the object of the invention being to provide a device or apparatus whereby hose or other similar articles may be conveniently repaired or darned.

The invention consists in certain new combinations, hereinafter described and claimed.

In the drawings, Figure 1 is a perspective showing my improved device in position ready for use. Fig. 2 is a section on a line 2 2, Fig. 1, looking in the direction indicated by the arrow. Fig. 3 is a broken plan showing the warp-opener swung outwardly, so that the warp-threads may be adjusted in position over the work without interference from said warp-opener.

1 represents a shoe or saddle formed of sheet metal, the sides of which are resilient 30 or springy. The upper surface or part of this saddle has a depression of usual form, and the sides are corrugated or provided with external channels or grooves 2 2. This saddle or shoe, upon which the article to be 35 darned or mended is mounted, is adapted to fit within and cooperate with a frame consisting of wire rails or side pieces 3 3 and end pieces 4 4. The article to be mended is stretched or placed over the saddle, and then 40 the frame is adjusted over both to stretch and hold the fabric taut between the resilient sides of the saddle and the rails of the frame. At one end of the main frame I provide a comb 5, and with a movable slotted frame 6 45 I provide another comb 7. This frame which carries the comb will hereinafter be called the "comb-frame." The comb-frame and comb are adjustable on the main frame through the medium of standards 8, which 50 are connected with the top rail or with one rail on each side of the frame by means of eyes, as shown. The eyes are of such rela-

tive dimensions as to cause the standards to grip the rails and hold the frame in any adjusted position. The warp is drawn through 55 and around the teeth of the combs and arranged longitudinally of the work and main frame in any suitable manner; but by reason of the fact that both combs are pivoted to the frame they may be swung open and the warp- 60 threads led around them back and forward and then the two combs swung into place, so as to bring the warp just above the fabric held by the saddle. When this is done, the movable comb-frame may be adjusted by 65 sliding the standards along the rails to bring the warp-threads taut. The free ends of the combs swing into or behind hooks or catches 9, so that when in place they are firmly held.

10 is the warp-opener, consisting of a piv- 70 oted yoke provided with teeth or projections 11, having concave or curved edges to grasp and hold on the threads when brought down upon the same. The opener is loosely mounted on a shaft or rod extending across and 75 above the main frame, the rod being supported by risers or standards 12, slidably connected with rails on opposite sides of the main frame. These risers or standards are not only slidably connected with the rails, but also pivot- 80 ally connected with the rails, so that they may swing outwardly. One end of the warpopener is also jointed to or pivotally connected with one of these risers, and the other end is detachably connected with the other 85 riser, as shown at 13, so that the warp-opener may be brought into operative position after the warp-threads have been brought into position adjacent the article to be mended. The risers or standards 12 are made of spring 90 metal, so that the opener may be moved laterally and its teeth or projections caused to alternately engage alternate warp-threads. The opener is normally held in raised position by means of a spring 14. The opener, be- 95 ing supported on risers which are slidably connected with rails of the main frame, may be adjusted to bring it into operation at a constant distance from the weft-threads.

Having described my invention, what I 100 claim as new, and desire to secure by Letters Patent, is—

1. In a darning apparatus, the combination of a main frame, warp-holders or combs piv-

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oted at one end of the main frame to swing laterally, whereby the warp may be readily led around the teeth of the holders and then swung into position adjacent to the goods to be darned, substantially as described.

2. In a darning apparatus, the combination of a supporting-frame having rails or side pieces and a pair of warp-holders, one of which is slidably connected with the frame and having eyes to grip the rails, whereby the warp may be drawn taut and held, substantially as described.

3. In an apparatus for darning, the combination of a frame having side rails, risers slidably connected with said side rails, and a warp-opener pivotally connected with the

risers to swing laterally, substantially as described.

4. In an apparatus for darning, the combination of a frame, warp-holders connected 20 with the frame risers or supports on opposite sides of the frame, a warp-opener pivotally connected with one of said risers and detachably connected with the other, substantially as described.

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

BARNETT BAKER.

Witnesses:

F. H. BARNEY, H. E. BLAISDELL.