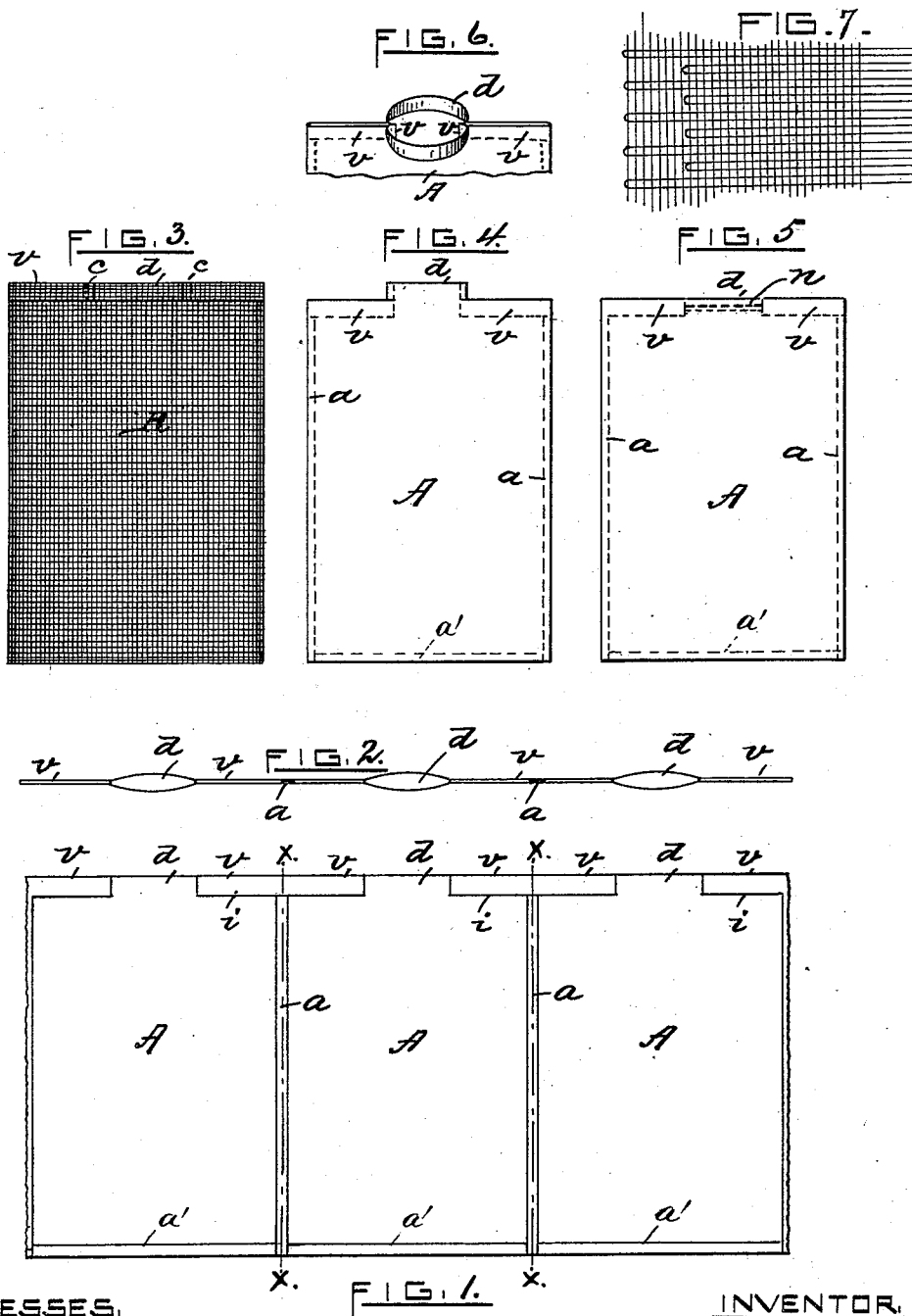


(Model.)

J. A. KNIGHT.
WOVEN BAG.

No. 570,174.

Patented Oct. 27, 1896.



WITNESSES.

Charles T. Harrington.
G. H. Brown.

FIG. 1.

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UNITED STATES PATENT OFFICE.

JESSE A. KNIGHT, OF ENFIELD, RHODE ISLAND.

WOVEN BAG.

SPECIFICATION forming part of Letters Patent No. 570,174, dated October 27, 1896.

Application filed October 4, 1895. Serial No. 564,664. (Model.)

To all whom it may concern:

Be it known that I, JESSE A. KNIGHT, of Enfield, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Woven Bags; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to bags made by weaving them complete in a loom connected together in the form of a web to be afterward separated.

The construction of the bag is fully explained and illustrated in this specification and the accompanying drawings.

Figure 1 represents three of the bags joined in a web as they come from the loom. Fig. 2 is an edge view of the web, showing the opening in the ends of the bags. Fig. 3 shows one of the bags separated from the web with the wrong side out, as they are woven. Fig. 4 represents the bag turned right side out, as it is when used. Fig. 5 shows the bag filled and the opening closed. Fig. 6 is a view of the opening in the end of the bag. Fig. 7 is a diagram showing the difference in weaving the strip or top of the bag and the body.

The object of the invention is to produce bags complete from the loom, having only to be separated from each other, with strong woven seams or joints on all sides and a small opening at one end to be closed when the bag is filled. The weak part of the woven bag as commonly made is the end that has to be sewed up clear across the bag, the long-sewed closure not being so close or strong as a woven seam, and by reducing the space to be closed finally to as small a part of the end as possible there is much time saved in closing up the bags when full and the end is much stronger. The construction of the bag is as follows: In the loom, when woven, the bags lie lengthwise across the web and are joined together at their sides. (See Fig. 1.) They consist of a web of double weaving joined together at spaces the width of the bag apart by strips *a a* of interlocked weaving together

of the two webs, which strips form the sides of the bags *A A* when they are separated from each other by tearing or cutting through the center of the strips, as indicated by the dotted lines *x x* in Fig. 1, the bottom *a'* of the bag being formed by the close-woven sides at the bottom of the figure.

The end of the bag having the opening *d* is made by weaving the upper and lower webs together as one for a space extending far enough in from the edge to form the neck of the opening *d*. This single web *v* is woven along one side of the web except for a space of about one-third of the width of each bag, which space is left open by weaving the upper and lower warps separate from each other with selvages on both portions. The bags are then separated by tearing or cutting them apart on lines *x x*, Fig. 1, and short cuts are made in from the edge on the dotted lines *c c*, Fig. 3, near the sides of the openings *d*. They are then turned the other side out, so as to bring the edges of the strips *a a a'* and *v v* on the inside of the bag. (Indicated by the dotted lines in Figs. 4 and 5.) These short cuts *c c* are for the purpose of separating the neck portion, that it may be turned out, as in Fig. 4. The neck of the opening of the bag is seen in Fig. 6, showing portions of the seams *v* on the inside. After the bag is filled the neck of the opening *d* is folded once or twice, as may be preferred, and secured by a row of stitches *n*, (see Fig. 5,) which makes a very strong closure.

To render the closed strips of the top more suant than they would be if they contained all the filling of the upper and lower webs, the alternate weft-threads are turned back (see Fig. 7) at the inner edge *i*, Fig. 1, of the strip *v* by not changing the position of the warp-threads at every alternate return of the shuttle, and when the bags are reversed these threads of the weft form a selvage on the outside that strengthens that part of the bag.

Having thus described my improved bag, I claim as my invention and desire to secure by Letters Patent—

1. As an article of manufacture, a bag having the webs composing the same woven together along the sides and bottom, and the

top thereof woven together for a portion of its width, whereby an open mouth is formed, substantially as described.

2. As an article of manufacture, a bag having the webs composing the same woven together along the sides and bottom, and the top thereof woven together for a portion of its width, whereby an open mouth is formed,

the mouth being surrounded by a neck projecting from the top of bag, substantially as described.

JESSE A. KNIGHT.

Witnesses:

E. H. HOWARD,
JAMES E. ARNOLD.