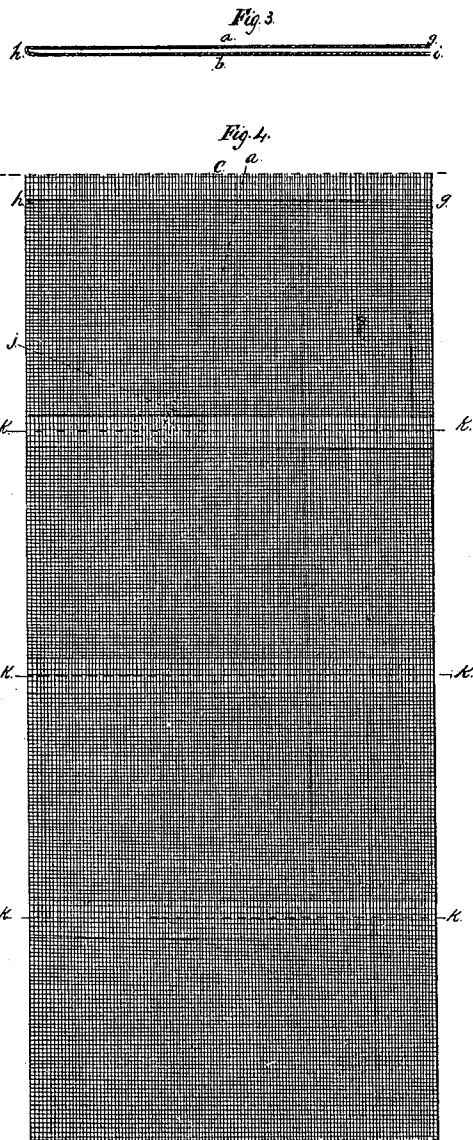
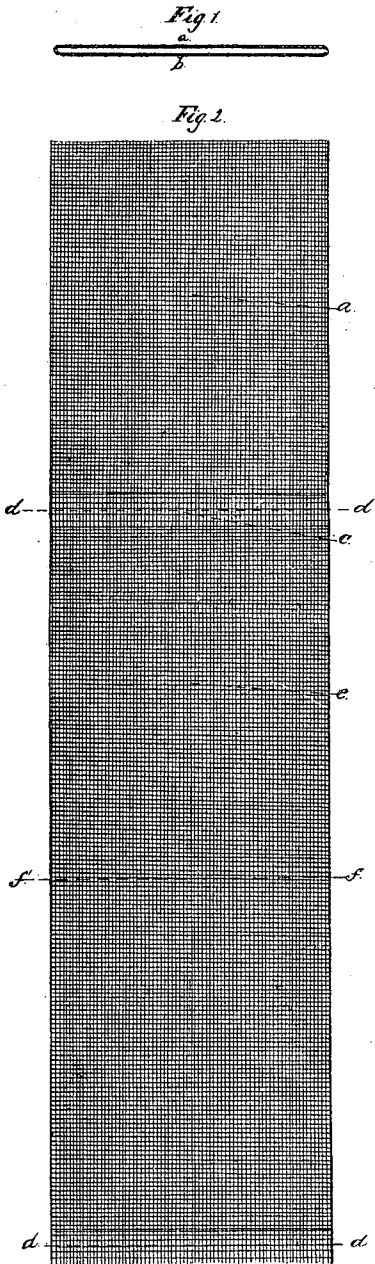


W. B. CARLOCK.

METHOD OF AND PROCESS FOR WEAVING BAGS CLOSED AT BOTH ENDS.

No. 6,566.

Patented July 3, 1847.



UNITED STATES PATENT OFFICE.

W. B. CARLOCK, OF NEW YORK, N. Y.

MANUFACTURE OF BAGS AND SACKS.

Specification of Letters Patent No. 6,566, dated July 3, 1849.

To all whom it may concern:

Be it known that I, W. B. CARLOCK, of the city, county, and State of New York, have invented a new Manufacture or Process of Weaving Bags Closed on Three Edges Without Seam, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known, and of the manner of making and constructing the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents an edge view of a bag woven by my improved process and Fig. 2, a series of such bags in the piece before they are separated, the red lines representing the union of the two cloths, Fig. 3 an edge view of a bag woven by a modification of my process; and Fig. 4 a series of such bags before they are separated.

The same letters indicate like parts in all the figures.

My invention for weaving bags without seam consists in weaving together two or more warps to form one cloth, and with the same weft two or more warps to form the other cloth, when the weft is carried around from one cloth to the other at one or both ends to unite the cloths in combination with the weaving and uniting of the two cloths together at given distances apart to form either the closed end or closed sides of the bag.

The loom to be employed in weaving bags in accordance with my improved process must be mounted with four heddles, the warps being equally divided into four parts in manner well known to weavers, and which therefore does not need description or representation; but for the purpose of clearness in describing my improved mode of procedure, we will consider the heddles as being numbered 1, 2, 3, and 4. The heddles 1 and 2 operate the two sets of warps for the upper side (*a*) of the bags (Figs. 1 and 2). And the heddles 3 and 4 operate the warps for the lower side (*b*). In commencing the operation, heddle 1 is thrown up and the weft carried through by the shuttle: heddle 1 is still held up and heddles 2 and 3 carried up, leaving heddle 4 down, and the weft carried back; heddles 1 and 3 are then let down, leaving heddle 2 up and the weft carried through; heddle 3 is then let down and 1, 2, and 4 held up and the weft carried through,

and so on. In this way it will be seen that the warps operated by heddles 1 and 2 will be woven together to form one cloth (*a*), and those operated by heddles 3 and 4 will be woven together to form another cloth (*b*) below the first, the weft at each side passing around from one cloth to the other and uniting them at the edges instead of forming two selvages at each side; or in other words, that the weft carried by the shuttle passes continuously around the bag. When the length required for a bag has thus been woven, heddles 1 and 3 are thrown up, the weft carried through, these are let down, and heddles 2 and 4 carried up, and so on which forms a single cloth, as at (*c*), of double thickness to unite the ends of the two bags. This single cloth is woven for a length of from one to two inches, so that when cut across in the middle at the line (*d*) it will give the required strength to the closed ends of two bags. The cloth is then woven double for a length equal to two bags as at (*e*) so that when cut at the line (*f*) it will form the open end of two bags, which may be hemmed or not at pleasure. And in this way the whole length of the warps is worked up.

This mode of procedure may, however, be varied when the width of bags is not sufficient to occupy with economy the whole width of the loom, by weaving the width of the bags in the direction of the warps. This modification is represented in Figs. 3 and 4. For this modification at the commencement the four warps are woven together as at (*e*) to make a single cloth in manner described above, to form the union for one edge of the bag, and when enough of this has been woven to give the required strength, heddle 1 is thrown up, the shuttle carried through, heddles 1, 2, and 3 are then held up leaving heddle 4 down and the shuttle carried through; heddle 3 is then let down and heddle 4 thrown up and the shuttle carried back, which forms a selvage at (*g*); heddle 2 is then held up and 1, 3, and 4 let down, which unites the two cloths at (*h*) on the other side of the loom, heddle 2 is then let down and heddle 1 thrown up and the shuttle carried through which forms another selvage at (*i*) on the same side of, and above the selvage (*g*), and so on until a sufficient length has been woven to make the width of a bag, and then the warps of heddles 1 and 2 are operated together to weave in with the warps of heddles 3 and 4 to make a single

cloth as at (*j*) for the edges of two bags when cut a part along the line (*k*). In this way the bottom or closed end (*h*) of the bag is formed and the two selvages (*g*) and (*i*) for the open end by carrying the weft from the upper cloth (*a*), around and through the under sloth (*b*) and back through this lower cloth to form the selvage (*g*), again around the closed end (*h*) through the upper cloth (*a*), and back to form the selvage (*i*), and so on. In this way the necessity of binding the open end is avoided while at the same time the edges and the bottom are closed by the process of weaving so as to complete the bag without sewing or the use of thread and needles.

I have in the above description numbered the heddles and warps and specified the succession in which they are operated, but this was simply to give a clear idea of my mode of procedure, and I do not therefore wish to confine myself to this specific succession or to the number, as it may be inverted or other-

wise modified, and the number increased to more than two for each cloth, without essentially changing the principle of my invention.

What I claim therefore as my invention is—

The producing a new manufacture of bags by weaving together two or more warps above and two or more below to form two cloths, when the weft is carried around from the one to the other at one or both sides to unite the two cloths, substantially as herein described; in combination with the weaving of the two cloths together at given points to unite them by weaving together all the warps at given distances for forming the closed sides or ends of bags, substantially as described.

WM. B. CARLOCK.

Witnesses:

A. P. BROWNE, Jr.,

A. E. PETERS.