

(No Model.)

F. DRIFFILL.
SACK TIE.

No. 581,542.

Patented Apr. 27, 1897..

Fig. 1.

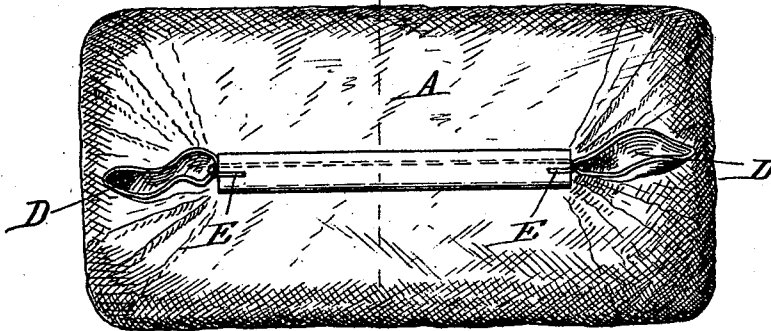


Fig. 2.

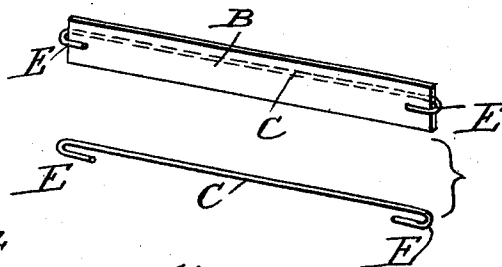
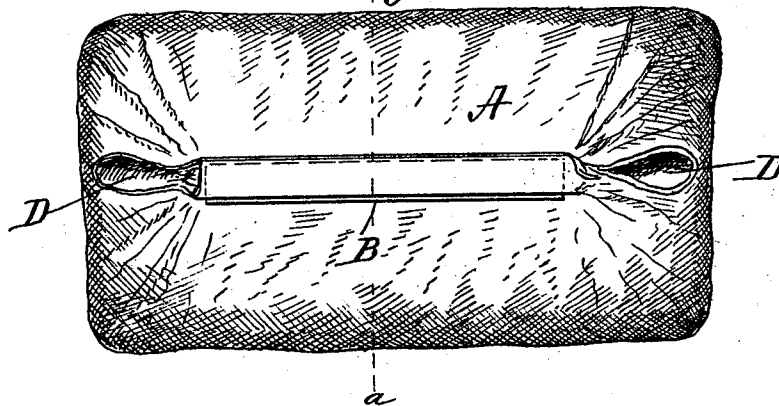


Fig. 4.

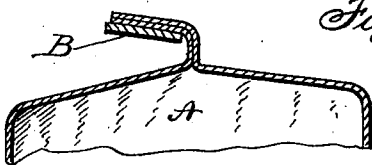
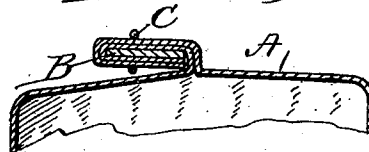


Fig. 5.



Witnesses
Frank L. Ourand,
George J. Weber

Inventor
Frederick Driffill
By John G. Manahan
his Attorney

UNITED STATES PATENT OFFICE.

FREDERICK DRIFFILL, OF SHAFTER, TEXAS.

SACK-TIE.

SPECIFICATION forming part of Letters Patent No. 581,542, dated April 27, 1897.

Application filed December 2, 1896. Serial No. 614,183. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK DRIFFILL, a citizen of the United States, residing at Shafter, in the county of Presidio and State of Texas, have invented certain new and useful Improvements in Sack-Ties; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention consists in improvements in sack-ties, and comprises, essentially, a transverse brace adapted to be folded in with the upper edges of the open mouth of the sack and to be held in position by a metallic lock or key, adapted to be hooked at each end over the respective ends of the aforesaid brace, thus not only holding the latter from a retrogressive rotation, but also retaining the corners of the sack in the usual gathered condition for convenience in grasping that end of the sack.

At the present time flour is generally packed for transportation in sacks made of cotton cloth, and the only practical mode thus far of closing the mouth of the sack has been and is by a series of long stitches. The latter, in the transportation of the flour and the necessary handling incident thereto, stretches the fabric which constitutes the texture of the sack, creating openings of sufficient size to admit dirt and insects, which is especially objectionable in warmer climates, where insects are numerous and troublesome.

The purpose of my invention is to absolutely seal the mouth of the sack as closely, if not more so, as any other portion thereof.

While my invention is applicable to sacks used for shipping grain, potatoes, and all other commodities usually transported in sacks, it is more especially advantageous in the shipment of flour, for the reason of the greater desire to keep the latter in a clean and pure condition.

I attain the above objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a closed sack provided with my invention. Fig. 2 is an illustration of the

process of placing the tie, showing the brace B as it appears just previous to the last lap, as shown in Fig. 1. Fig. 3 is a detail of the two parts which constitute the tie. Fig. 4 is a cross-section in the line *a a* of Fig. 2. Fig. 5 is a cross-section in the line *a a* of Fig. 1. Similar letters refer to similar parts in each view.

A is an ordinary cloth flour-sack generally used in the transportation and storage of flour, and in Fig. 1 is shown lying on its side with its mouth projected toward the front.

B is a brace of parallelogramic form of either wood or metal, but preferably of wood, on account of its lightness and cheapness. The brace B is in length about one-half the width of the sack A and about seven-eighths of an inch in width and is placed centrally in the mouth of the sack. In applying said brace the upper open edges of the sack A are brought to the same line and the brace B placed against one side of the sack flush with the margins of the aforesaid open edges. The latter are then folded down over the brace B, as shown in Figs. 2 and 4, in which condition both of the upper edges of the sack A will lie along one side of the brace B with about one-quarter of the upper edges of the mouth of the sack extending beyond the ends of the brace B, respectively. After reaching the position shown in Fig. 2 the brace B is given an additional half-rotation toward the body of the sack, thereby turning the open edges of the mouth of the sack upward between said brace and the main body of said sack, as shown in Fig. 1. The slack of the mouth of the sack at one end of the brace B is then gathered, with the lock C, between the main portion of the latter and the side of the brace B near one end of the latter and said lock hooked over the end of said brace. The opposite end of the lock C is then passed over the slack portion of the sack at that end of the brace B, so that such slack shall project upward between the main portion of the lock C and the adjacent side of the brace B. This second end of the lock C is then in like manner hooked over the adjacent end of the brace B, and the protruding ends of the aforesaid slack are then forcibly drawn outwardly and upwardly between the continuous side of the lock C and the adjacent side of the brace B and at the respec-

tive ends of the latter, as shown in Fig. 1. With the operation thus completed the sack A is left with the projecting corners D D, convenient for grasping in the handling of the sack.

The lock C, as shown in detail in Fig. 3, is provided with the hooked ends E E of sufficient length to retain their grasp over the respective ends of the brace B and the interposed fabric under all conditions. The lock C is made of the ordinary steel wire of any desired size and strength for the purpose intended.

As the respective sides of the mouth of the sack A draw in directly opposite directions from between the lock C and the inner edge of the brace B, said brace and lock when once in position, as shown in Fig. 1, are held by the aforesaid opposite drawing from any further rotation in either direction.

The forcing of the corners D, with that portion of the open mouth of the sack gathered therewith, respectively between the lock C and brace B, as aforesaid, results in wedging such gathered portions very tightly between said lock and brace, and any additional strain upon said corners D results only in still further tightening the same in the pinch between the lock and brace at the respective ends of the latter.

In addition to the advantages before named my sack-tie will be seen to close the entire mouth of the sack by lateral compression thereof and without the formation of openings of any size and character in any portion of the texture of the sack. In fact it will be found in practice that the mouth of the sack when closed with my invention will be the tightest portion of the entire sack. My invention also leaves the sack in the ordinary conventional shape, in convenient form for handling and storing.

When once familiar with the operation of

my invention, the operator can close a sack in one-third of the time usually required for sewing. The sack can be opened and closed again with equal facility.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. In a sack-tie, the brace B adapted to be folded within the open edges of the mouth of the sack, and a lock C provided at each end with suitable hooks E, and adapted to gather the corners of the sack between its main portions, at each end thereof and the adjacent side of the brace B, and hooked at each end over the respective ends of said brace, substantially as shown and for the purpose described.

2. In combination with the open end of the sack A, a brace B of a length less than the width of said sack and adapted to be folded centrally in the mouth of said sack, and a lock C provided with hooks E adapted respectively to be seated over the ends of the brace B, outside of the sack folded thereon and to receive between its main portions and the adjacent side of said brace, the residue of the mouth of said sack in the gathered condition shown, for the purpose described.

3. In a sack-tie, and in combination with the mouth of the sack, the brace B and the lock C provided with the hooks E, E, said brace being adapted to be interfolded with the mouth of said sack, and said brace and the end portions of said sack being adapted to be clamped against the exterior of said fold by said lock, substantially as shown and for the purpose specified.

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

FREDERICK DRIFFILL.

Witnesses:

JOHN G. MANAHAN,
ISABELLE MANAHAN.