

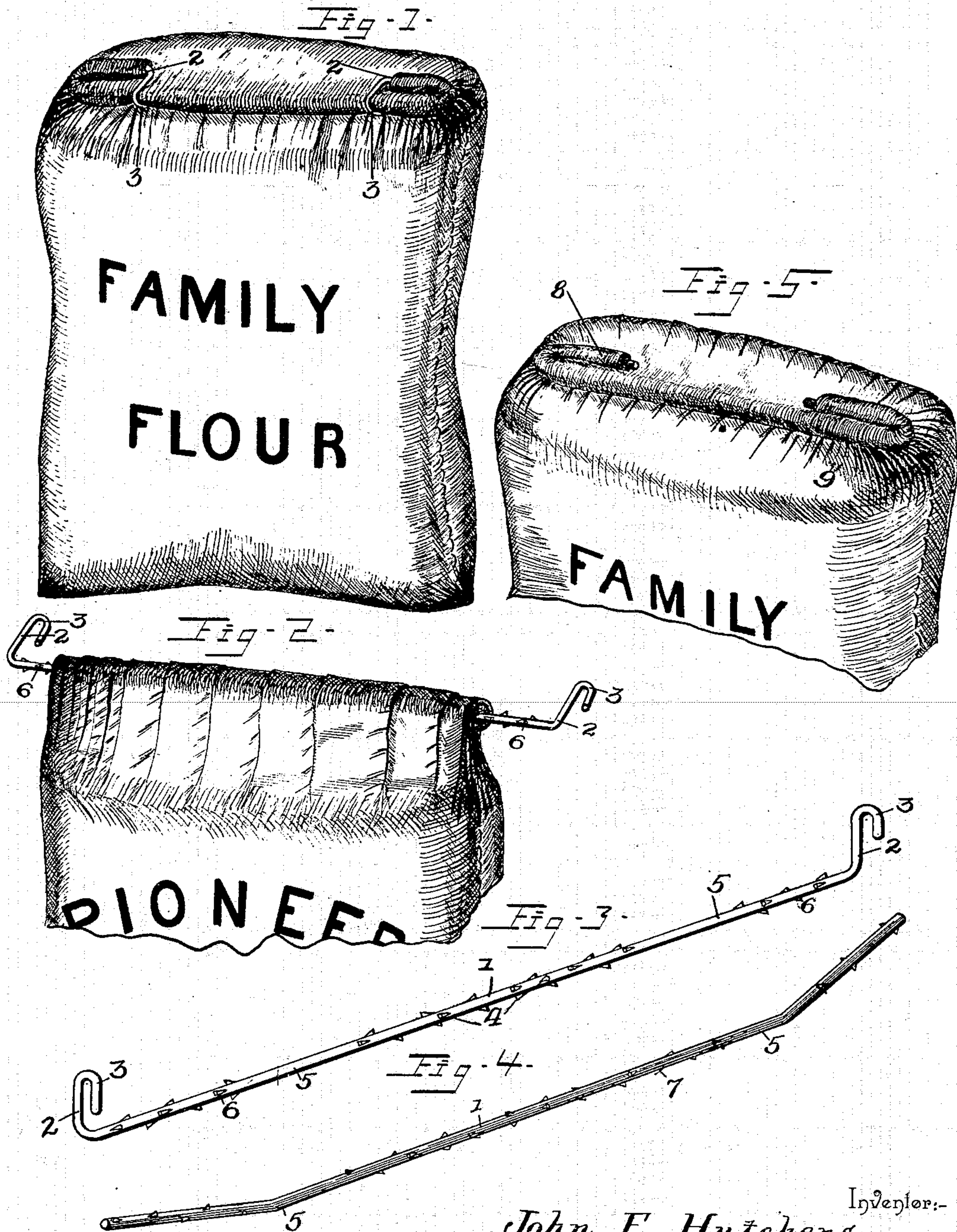
No. 612,108.

Patented Oct. 11, 1898.

J. F. HUTCHENS.  
BAG FASTENER.

(Application filed Sept. 16, 1897.)

(No Model.)



Inventor:-  
John F. Hutchens,

Witnesses

*C. J. Young*  
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# UNITED STATES PATENT OFFICE.

JOHN F. HUTCHENS, OF PIONEER, MISSOURI, ASSIGNOR OF THREE-FIFTHS  
TO WILSON HUTCHENS AND ISAAC C. HUTCHENS, OF SAME PLACE.

## BAG-FASTENER.

SPECIFICATION forming part of Letters Patent No. 612,108, dated October 11, 1898.

Application filed September 16, 1897. Serial No. 651,887. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. HUTCHENS, a citizen of the United States, residing at Pioneer, in the county of Barry and State of Missouri, have invented a new and useful Bag-Fastener, of which the following is a specification.

My invention relates to improvements in bag-fasteners; and the object is to provide a fastener which may be easily and quickly applied to a bag to securely close the mouth thereof.

A further object of the invention is to provide an improved fastener which is simple in construction, efficient and reliable in service, and cheap of manufacture, so that it is especially adapted for use by the milling trade in closing and fastening flour-sacks.

My improved fastener is especially adapted to fill a want experienced by flour manufacturers, because the fastener is so constructed and applied that the bag cannot easily be opened by manipulating the fasteners, in consequence of which the housewife or baker proceeds to tear or rip open the bag or sack, and thus mutilate the same to such an extent that unscrupulous dealers will not be induced to collect the mutilated bags or sacks and refill them with an inferior grade of flour to be sold or "palmed off" on the public as flour of the quality originally packed and contained in the sacks or bags.

To the accomplishment of the purposes of my invention it consists, broadly stated, in the combination, with a bag or sack, of a fastener having an elongated barbed shank which is folded or rolled with the bag or sack, at the mouth thereof, and which fastener has its ends bent at an angle to securely close the open mouth of the bag or sack.

The invention further consists in a bag-fastener comprising a straight barbed shank and angular hooked arms at the ends of said shank and adapted to be bent with the bag to lie parallel to the shank and to have the hooks thereof engage with said shank to compactly and securely hold the mouth of the bag in a closed condition and prevent the bag from being opened easily by the manipulation of the fastener.

To enable others to understand my invention, I have illustrated the same in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of part of a bag, showing the preferred construction of my fastener attached to the mouth of the bag to securely and permanently close the same. Fig. 2 is a view in perspective, illustrating the operation of applying the fastener to the bag. Fig. 3 is a detail perspective view of the preferred construction of the fastener detached from the bag. Fig. 4 is a view of another embodiment of the invention. Fig. 5 is a view of a bag with the fastener illustrated by Fig. 4 applied thereto.

Like numerals of reference denote corresponding parts in all the figures of the drawings.

The fastener illustrated by Fig. 3 and shown applied by Figs. 1 and 2 is made from a single length of stout wire, which is of such strength that it cannot easily be bent by the fingers and which requires the employment of a tool for bending the wire in the application of the fastener to the bag. Said fastener consists of an elongated bar or shank 1, which is bent at its ends to form the off-standing arms 2 2 and the hooks 3 3. I prefer to bend the wire at right angles to the shank to form the arms 2, after which the ends of the wire are bent or doubled upon the arms for the purpose of producing the hooks 3. The elongated straight shank or bar of the fastener is provided with a series of barbs or teeth 4. These barbs or teeth 4 terminate at points some distance within the angular arms 2, thus leaving certain portions of the shank unbarbed and smooth, as indicated at 5, and said shank or bar is furthermore provided with other series of barbs or teeth, which barbs or teeth 6 are formed on the shank between the plane smooth portions 5, and the angular arms 2.

In the application of my bag-fastener to a bag I bend the shank at the smooth unbarbed sections 5 of said shank, and the employment of these unbarbed plain sections on the shank is important, because the bending of the wire is facilitated and the shank is not weakened by the formation of barbs or teeth thereon,



in consequence of which the shank possesses the necessary strength and durability to withstand the rough service to which it may be subjected in shipping and handling the flour-sacks.

To apply my bag-fastener to a sack, the sack is first filled with flour and the edges of the sack are then lapped or closed against each other. The elongated barbed shank of the fastener is now fitted laterally against one side of the closed mouth of the bag, after which the fastener and the mouth of the bag are folded or rolled together, so that the elongated straight shank is inclosed within the rolled or folded part of the bag, the angular hook-formed ends of said fastener protruding from opposite sides of the bag. After the fastener and bag have been rolled together and compactly drawn against the contents of the bag I proceed to bend the shank at points where the smooth sections 5 are located, thus turning inwardly the barbed parts 6 of the fastener-shank to bring them parallel to the major portion or length of said fastener-shank, and the attachment of the fastener is completed by fitting the hooks 3 over the shank and the rolled edges of the bag. As before intimated, this bending of the fastener-shank and the application of the hooks to the shank and rolled mouth of the bag can be effected to good advantage by the employment of a tool especially constructed for the purpose.

The described construction of the fastener provides a means for so securely and tightly closing the mouth of the bag that the stiff wire cannot readily be bent to good advantage in order to release the fastener from the bag, and as a result of this construction and mode of application of the fastener the purchaser of the flour is induced to tear or rip open the bag, and thus mutilate the same to such an extent that unscrupulous dealers will not refill the bag with flour of an inferior quality and attempt to deceive the public by selling such flour in original sacks.

The embodiment of the invention illustrated by Figs. 4 and 5 contemplates a fastener having the generic features of the improvement illustrated by Figs. 1 to 3, inclusive; but such modified construction of the fastener is simpler in that the angular arms with the hooks are omitted. As shown by Fig. 4, the fastener is made from a single length of stiff wire having its end portions bent at obtuse angles to the straight length or shank of the fastener. This fastener is provided with a multiplicity of barbs or teeth 7, which extend continuously throughout the straight shank and the obtuse-angled ends thereof.

The method of applying the fastener shown by Fig. 4 is similar to that illustrated by Fig. 2 in that the straight barbed shank of the fastener is fitted laterally against and rolled with the edges of the bag, at the mouth portion thereof. After the bag and fastener have been rolled together, so as to close the

bag compactly upon the contents of the same, the obtuse-angled ends of the wire are bent around or looped, as indicated at 8 and 9 in Fig. 5, and thus the bent ends of the wire are brought into parallel relation to the straight shank on one side of the same. The barbed obtuse-angled ends of the fastener engage with the fabric of the bag to securely hold in place the fabric which engages with the barbs of said bent or doubled ends of the fastener, and thus the bag is securely and permanently closed.

No claim is herein made to a bag having its mouth portion rolled upon itself and a fastener which is inclosed within said rolled portion of the bag and which has its ends twisted inwardly upon itself and with a portion of the bag fabric, as such subject-matter is embraced in my other application, filed April 12, 1897, Serial No. 631,779.

I am aware that changes in the form and proportion of parts and in the precise details of construction may be made without departing from the spirit or sacrificing the advantages of the invention.

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

1. The combination with a bag or sack, of a fastener therefor which is separate from, or unattached to, said bag, and comprises a pliable, continuously-barbed wire or rod laid across the mouth of the bag or sack and rolled therewith, the ends of said pliable rod or wire being bent or turned at an angle to those parts of the bag and the wire which are rolled together, as and for the purposes described.

2. The combination with a bag or sack, of a fastener for closing the mouth of the same which is separate from, or unattached to, the bag, and consists of a pliable barbed rod or wire of a length greater than the width of the bag, and laid across the mouth of the same to have its barbs engage with the bag fabric and its ends extended beyond said bag; the bag-mouth and rod being rolled together, and the ends of the rod or wire bent or folded with a portion of the bag fabric at angles to the rolled part of the bag-mouth, as and for the purposes described.

3. As a new article of manufacture, a bag-fastener comprising a pliable, barbed wire or rod having its ends lying at angles to the length of the same, whereby the barbed wire or rod may be engaged with a mouth of the bag to be rolled compactly therewith, and its angular protruding ends provide convenient means for manipulating the fastener during the rolling thereof with the bag-mouth and for attaching the fastener and rolled bag fabric together at the ends of said rolled portion of the bag-mouth, as and for the purposes described.

4. A bag having its mouth portion rolled upon itself, and a barbed fastener which is inclosed within said rolled portion of the bag, and which has its ends folded or bent in-



wardly upon itself and with a portion of the bag fabric, substantially as described, for the purposes set forth.

5 5. The combination with a bag, of a barbed-wire fastener which is rolled with the edges of the bag, at the mouth portion thereof, said fastener having its ends bent or folded upon itself and engaged with the rolled mouth portion of the bag to cause the latter to fold with  
10 the folded or bent ends of said fastener, substantially as described.

6. The combination with a bag or sack, of a fastener having its shank folded or rolled with the bag at the mouth portion thereof and  
15 provided with bent ends which are interlocked with the shank, substantially as described, for the purposes set forth.

7. As a new article of manufacture, a bag-fastener consisting of an elongated shank and  
20 the offstanding hooks which are adapted to be bent around and engage with said shank after the fastener has been attached to a bag, substantially as and for the purposes described.

8. As a new article of manufacture, a bag- 25 fastener consisting of a length of wire forming a shank, angular arms at the extremities of the shank, and hooks at the free ends of said arms, said shank being barbed or toothed at intervals and leaving unbarbed, smooth 30 portions at distances from the ends of the fastener-shank where the latter is designed to be bent, for the purposes described, substantially as set forth.

9. A bag-fastener comprising a single length 35 of pliable wire provided with barbs or teeth and rolled with the edges of the bag at the mouth portion thereof, said wire having its ends bent into interlocking engagement with the folded portion of the bag-mouth, substan- 40 tially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN F. HUTCHENS.

Witnesses:

WM. A. RHEA,  
L. L. ALLEN.