

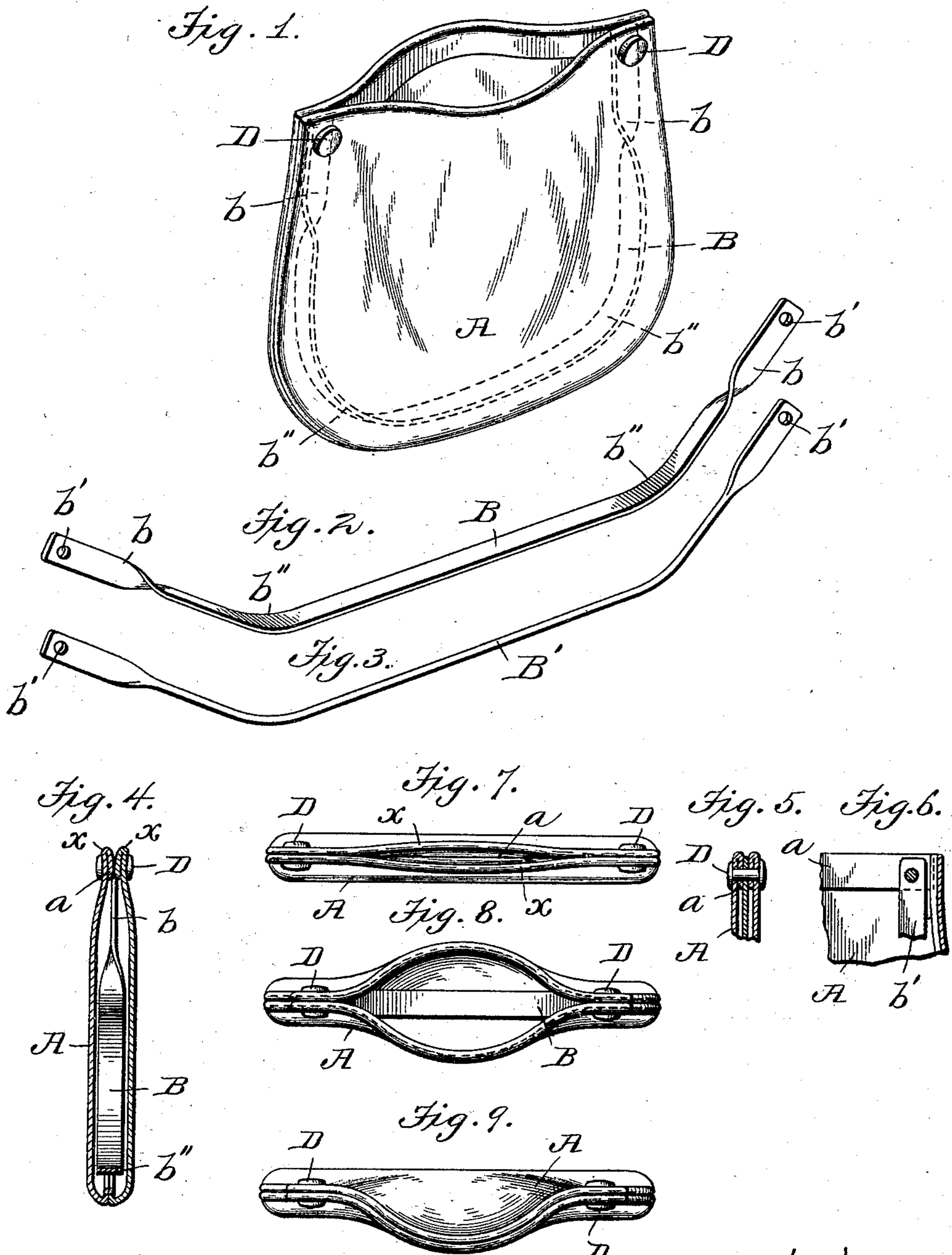
No. 670,029.

Patented Mar. 19, 1901.

A. J. MEIER.
SELF CLOSING BAG OR POUCH.

(Application filed Oct. 25, 1900.)

(No Model.)



ATTEST-

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ALBERT J. MEIER, OF KIRKWOOD, MISSOURI.

SELF-CLOSING BAG OR POUCH.

SPECIFICATION forming part of Letters Patent No. 670,029, dated March 19, 1901.

Application filed October 25, 1900. Serial No. 34,281. (No model.)

To all whom it may concern:

Be it known that I, ALBERT J. MEIER, a citizen of the United States, residing at Kirkwood, county of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Self-Closing Bags or Pouches, of which the following is a full, clear, and exact description, 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, forming part of this specification.

This invention relates to a new and useful improvement in self-closing bags or pouches, and has for its object to provide a simple, inexpensive, and durable construction of the same.

The essential features of this invention reside, first, in the novel construction of the bag or pouch proper, wherein means are provided for forming a valve to prevent egress of its contents when the same is in a closed position, said means also giving to the mouth of the bag or pouch such shape that said mouth will at all times properly open when the bag is correctly manipulated; second, in the novel construction and arrangement of the spring employed in carrying out my invention; third, in the novel means employed for securing said spring within said bag, and, finally, the invention consists in the novel construction, arrangement, and combination of the several parts of the device, all as will hereinafter be fully explained and afterward pointed out in the claims.

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

Figure 1 is a perspective view of my improved pouch or bag, the same being illustrated in an open position. Fig. 2 is a detail perspective view of the spring employed in carrying out my invention. Fig. 3 is a detail perspective view of a slightly-modified form of spring. Fig. 4 is a vertical transverse sectional view of my improved pouch or bag, the same being illustrated in a closed position. Figs. 5 and 6 are detail views showing the manner in which the spring is fastened to the pouch or bag. Fig. 7 is a top plan view of my improved pouch or bag when in a closed position. Fig. 8 is a top plan view

of the same when in an open position, and Fig. 9 is a top plan view illustrating the effect of not providing a pouch or bag of this character with means for insuring the proper opening of the same.

In the accompanying drawings, wherein like characters designate like parts throughout the several views, A indicates the pouch or bag proper, which is preferably formed by sewing or otherwise fastening two pieces of leather, cloth, or other flexible material together at three of their edges, leaving the upper edges unfastened, and then turning inwardly and downwardly the upper edges *a a*.

B indicates a spring, which, as shown in Fig. 2, consists of a flat strip of metal commonly known as a "leaf-spring," whose ends are provided with a quarter-twist *b b* or are so twisted that the widest dimensions of said ends are at right angles to the widest dimension of the middle or intermediate portion of said strip, each of which twisted ends *b b* being provided with a perforation *b' b'*. This spring B is preferably formed in the shape illustrated in the drawings, wherein it will be seen that two bends *b'' b''* are formed at suitable distances apart, preferably equidistant from each end of said spring, and by which construction the said bends *b'' b''* when the spring is bent to a U shape, as it is preparatory to and after its insertion in the bag proper, will relieve the middle portion of said spring of excessive strain by distributing the same over that portion intermediate the bends *b'' b''*.

In Fig. 3 I have illustrated a form of spring wherein I make use of a wire or rod B' and in which construction I simply flatten the ends, as shown, said ends having formed therein the perforations *b' b'*.

When the bag or pouch and its coöperating spring are to be assembled, I first bend the spring by forcing its ends toward each other and then insert the loop portion of said spring into the opening at the top of said bag or pouch, forcing the same into said bag as far as it will go, which is just the proper distance to bring the extreme ends of said spring slightly below the upper edges of said bag. I then rivet the bag and spring together by forcing a rivet D through both of the inwardly and downwardly turned flanges *a a*.

and through the perforation formed in the end of spring B. By this mode of fastening the bag and spring together it will be seen that very little room is occupied by the end portions *b b* of said spring, thus allowing the edges of the mouth portion of the bag to closely contact with each other. Furthermore, by causing the rivet D to pass through both sides of the bag and both of the flanges *a a* and the spring B a very secure fastening is produced, the double thickness of material on each side of the spring greatly lessening the liability of the bag tearing away from the spring, as is obvious. This mode of riveting also retains the flanges *a a* at all times within the bag and produces a smooth rounded edge on each side of the mouth portion of the same. These inwardly and downwardly turned flanges *a a* perform the double function of, first, acting as a valve for preventing egress of the contents of the bag when the same is inverted by their natural tendency to move inwardly or straighten out and by which action they contact with each other and effect a perfect closing of the mouth of said bag, and, second, by the tendency of said flanges *a a* to move inwardly, as just described, the upper edges of the sides of the bag forming the mouth are forced slightly outward, as is illustrated at *x x* in Fig. 7, which outward inclination of said edges results in starting the sides of the bag adjacent the mouth in their proper direction for opening and causes the mouth of the bag at all times to open in the manner illustrated in Fig. 8. This construction will prevent both sides of the bag from moving in the same direction, which would result in the mouth of the bag remaining closed, as is illustrated in Fig. 9, which is an objection which frequently occurs in

bags of this general construction where no means are provided for preventing its occurrence.

I am aware that minor changes in the arrangement, construction, and combination of the several parts of my device may be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. The combination with a bag or pouch, of a spring whose body portion is at right angles to the sides of the bag, the ends of said spring being twisted so as to lie parallel to the sides of the bag; substantially as described.

2. The combination with a bag or pouch, of a U-shaped spring whose body portion is arranged at right angles to the sides of the bag and whose ends are twisted so as to lie in a plane parallel to the sides of the bag, and means for securing the ends of said spring to the bag; substantially as described.

3. The combination with a bag or pouch, of a spring whose body portion is at right angles to the sides of the bag, the ends of said spring being twisted so as to lie parallel with the sides of the bag, said side walls being folded inwardly at the mouth, the inner edges of said folded portions being unattached and free to move; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 20th day of October, 1900.

ALBERT J. MEIER.

Witnesses:

WM. H. SCOTT,
A. S. GRAY.