## W. WEAVER. ENVELOPE.

No. 491,030.

Patented Jan. 31, 1893.

F79.1.

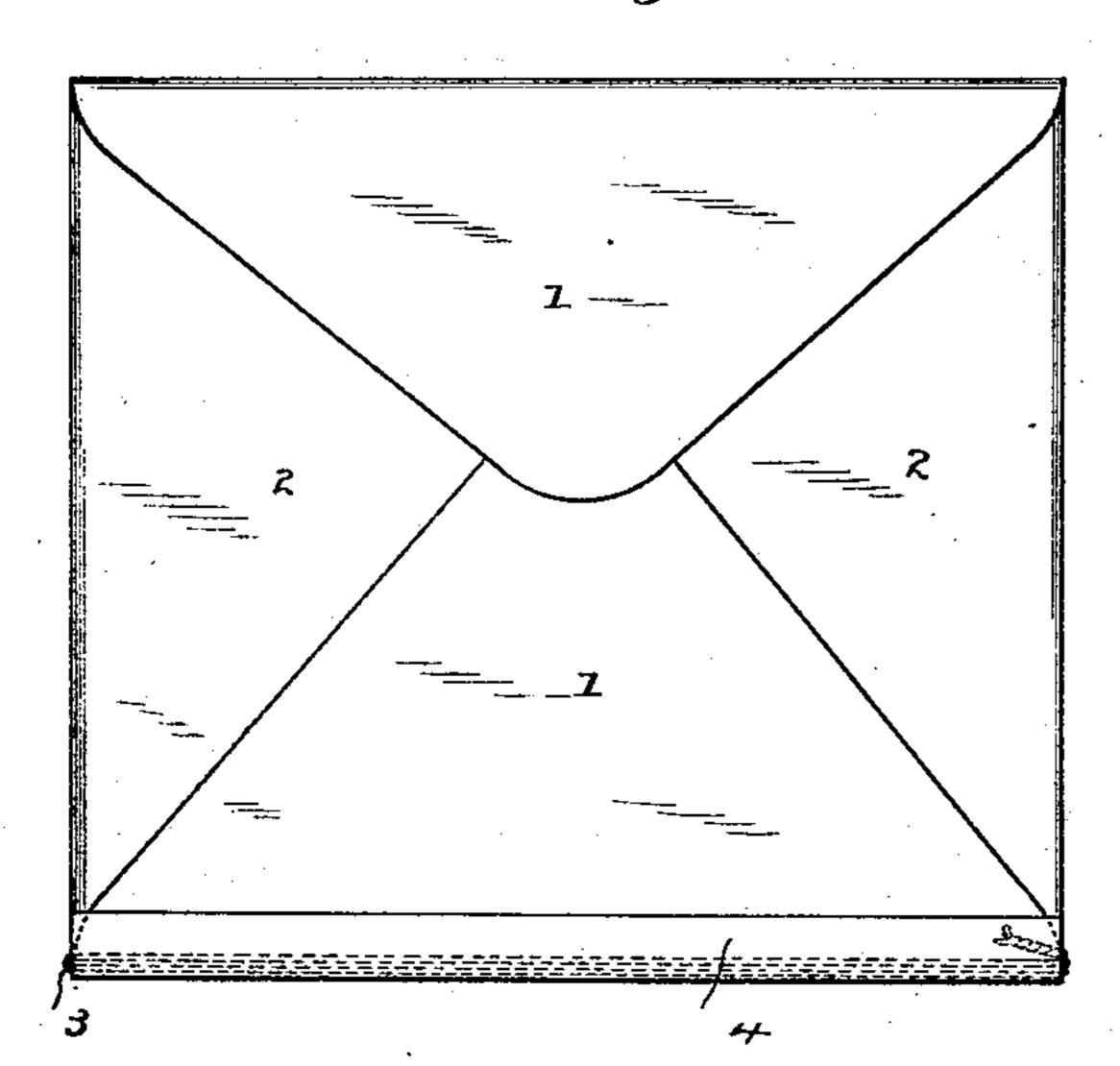


Fig.2.

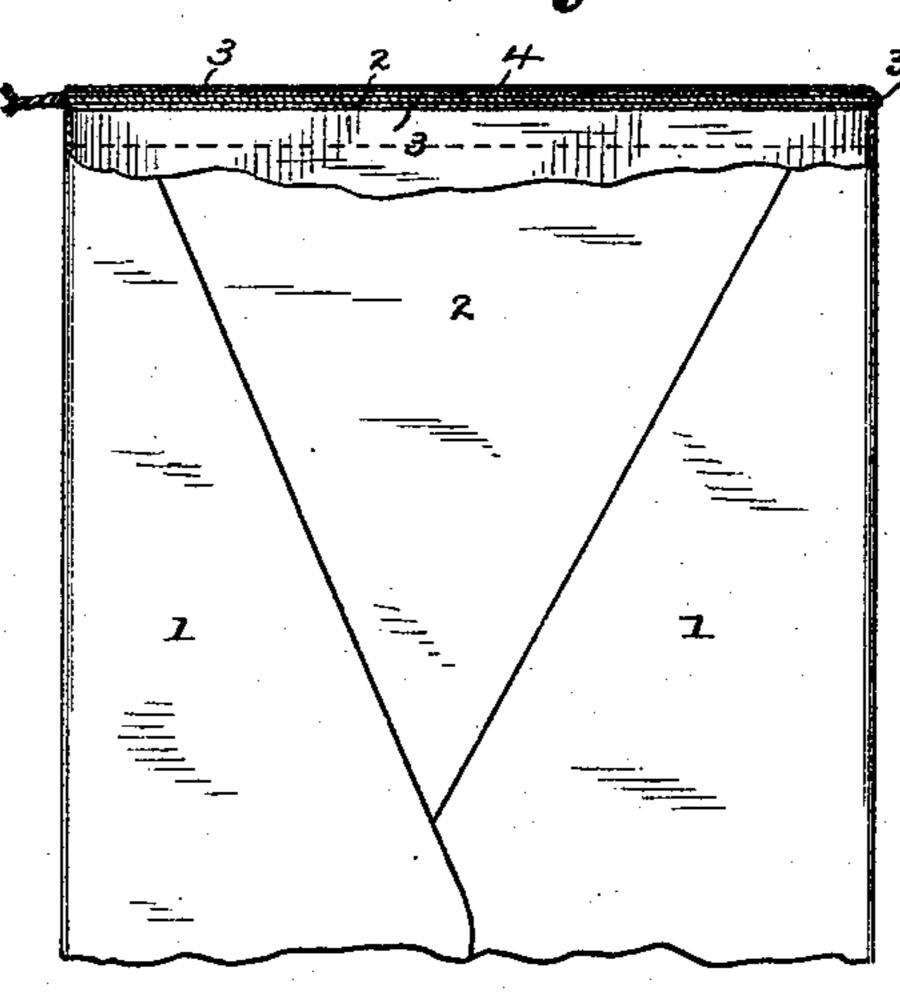
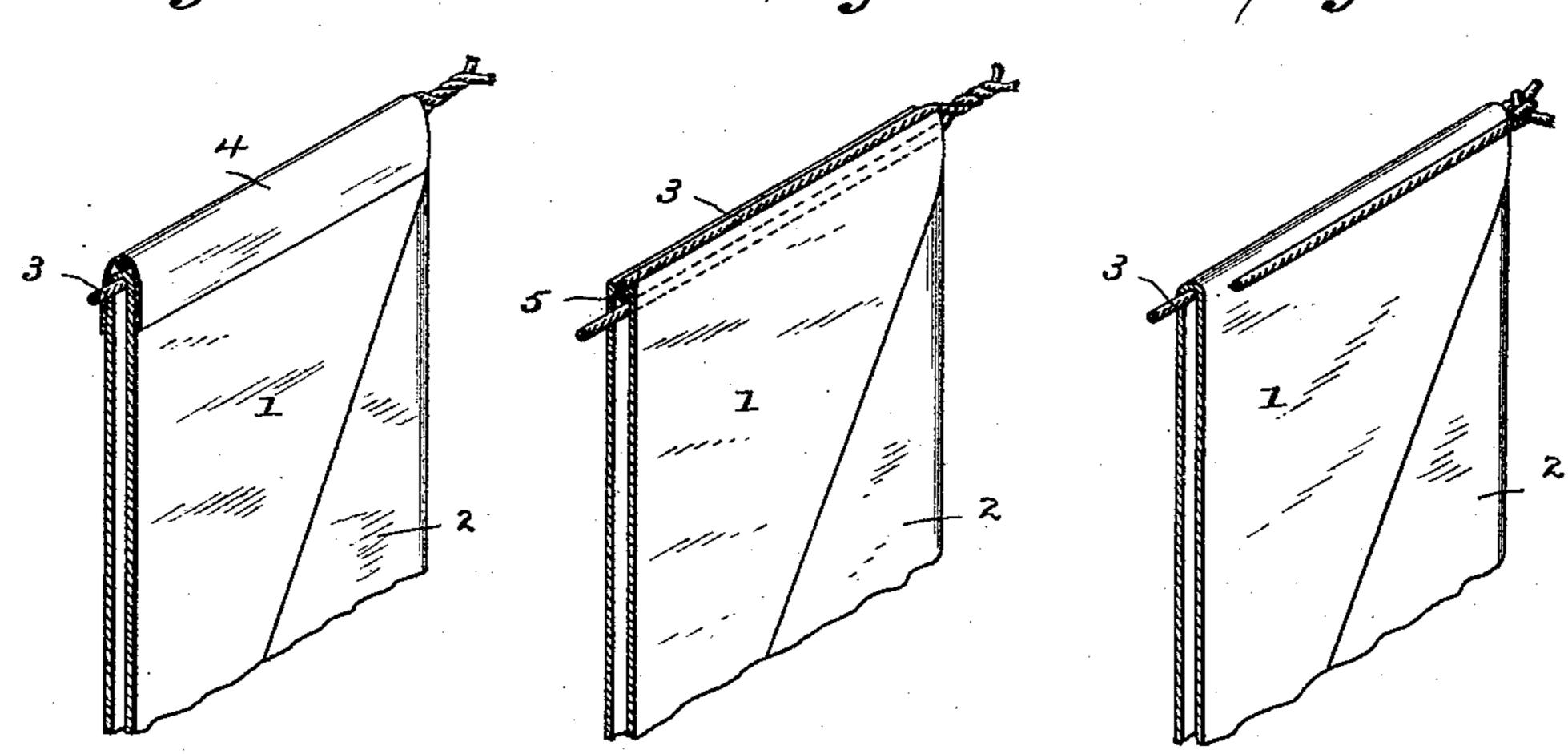


Fig.3.

Fig.4.

F7.5.5.



WITNESSES

Ho. A. Sames Pearl Mb. Reymolds. INVENTOR William Weaver By AMMbooster

## United States Patent Office.

WILLIAM WEAVER, OF NORWALK, CONNECTICUT, ASSIGNOR OF TWO-THIRDS TO CHARLES LAPHAM AND FRANK T. HYATT, OF SAME PLACE.

## ENVELOPE.

SPECIFICATION forming part of Letters Patent No. 491,030, dated January 31, 1893.

Application filed September 30, 1892. Serial No. 447,411. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WEAVER, a citizen of the United States, residing at Norwalk, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Envelopes; and I do hereby 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.

My invention belongs to the class of envelopes commonly known as self opening envelopes, that is envelopes provided at one of either the side or end flaps with a strong 15 thread secured within the envelope the end of the thread being left exposed so that it may be grasped by the operator and drawn backward thereby cutting open the end or side of the envelope. This class of envelopes has 20 never gone into general use for the reason that it has not been found possible to secure the threads in place so but that they would becomedetached from the envelopes when drawn backward instead of remaining in place and 25 tearing open the envelope. In order to overcome this objection and provide a self opening envelope which shall be thoroughly practical in use I provide the envelopes with a double thread instead of a single thread one 30 strand thereof lying upon the outer side of the envelope, and furthermore slightly modify the construction of the envelopes so as to conceal the outer strand of thread.

In the accompanying drawings, forming 35 part of this specification, Figure 1 is an elevation of an envelope showing one manner in which I have carried my invention into effect, the invention being applied to one of the side flaps of the envelope and the end of the double 40 thread concealed. Fig. 2 a view partially in section showing my invention as applied in the same manner to one of the end flaps of the envelope, the ends of the thread being twisted and left exposed. Fig. 3 a sectional 45 view on an enlarged scale, the application of the invention corresponding with Fig. 2. Fig. 4 a view similar to Fig. 3 illustrating another form in which I have carried my invention into effect, the outer strand of thread lying in 50 a groove in the end of the envelope, and Fig.

5 is a similar view illustrating still another form in which I have carried my invention into effect the outer strand of thread lying at the side of the envelope near the end instead of at the end and the ends of the thread being 55 knotted instead of twisted.

1 denotes the side flaps of an envelope and

2 the end flaps thereof.

3 denotes a thread or wire if preferred the length of which if used at the end of the envelope is more than double the width thereof and if used at the side of the envelope is more than double the length thereof. In the manufacture of envelopes this thread is covered with glue or mucilage and one strand thereof is folded within one of the flaps of the envelope either at the side or end the other strand lying along the outer end or side of the envelope. At one end of the envelope the thread will simply pass out and then double back over the outer side thereof the two ends of thread being twisted or knotted together at the opposite end or side of the envelope.

In Fig. 1 I have shown the ends of the thread as twisted together, laid close to one 75 corner of the envelope and the outer strand and the ends covered by a strip 4 of paper. In Fig. 2 I have shown the strip of paper as applied in the same manner to the end of the envelope, the ends of the thread being simply 80 twisted together and left exposed, the glue or mucilage upon the thread serving to keep the ends twisted together as shown. In Fig. 4 I have shown the end of the envelope as provided with a groove 5 formed by folding in 85 the end thereof, this groove being made just large enough to receive and hold the outer strand of thread. It will of course be apparent that in this form the covering strip may or may not be used as preferred. It is not 90 deemed necessary to provide another view illustrating this form in connection with the holding strip. In Fig. 5 I have illustrated a form in which both the groove and the covering strip are dispensed with. The outer 95 strand of thread is laid along the side of the envelope near the end instead of at the end, and the ends of the thread are knotted together instead of twisted. It will of course be apparent that various other modifications 100 of my invention may be made without departing from the principle thereof.

I claim:

1. The combination with an envelope having at one edge thereof a groove 5 formed by folding in the material of the envelope, of a double thread one strand of which lies within the envelope at the fold the other lying on the outer side of the envelope within the groove, the ends of said thread being suitably secured together.

2. The combination with an envelope having at one edge thereof a groove 5 formed by

folding in the material of the envelope, of a double thread one strand of which lies within 15 the envelope at the fold, the other lying on the outer side of the envelope within the groove, and a strip 4 covering the outer strand of thread substantially as described.

In testimony whereof I affix my signature in 20

presence of two witnesses.

WILLIAM WEAVER.

Witnesses:

A. M. WOOSTER, PEARL M. REYNOLDS.