A. B. GARDNER.

Grain-Bag and Fastening.

No. 217,362. Patented July 8, 1879.

Fig: 1.

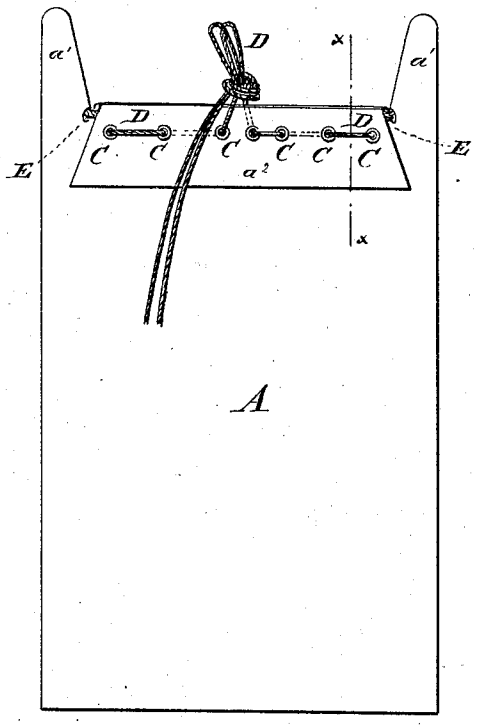



Fig: 2.

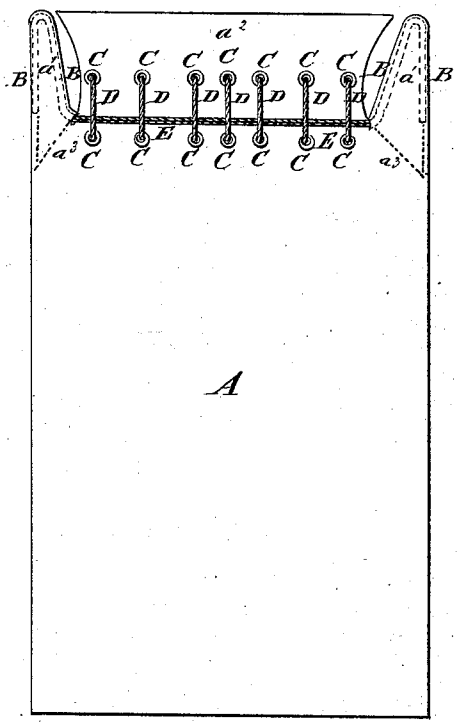



Fig: 3.

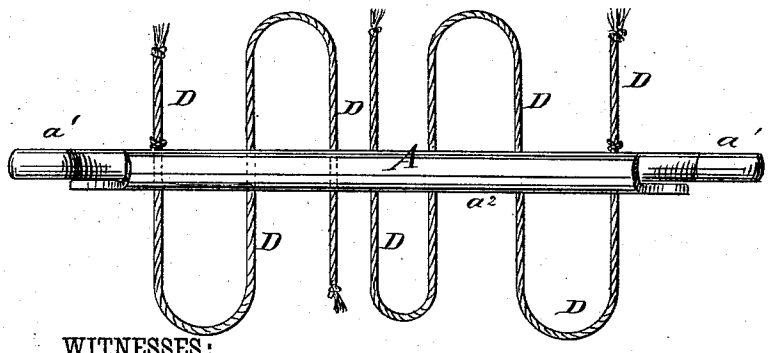
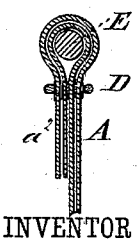



Fig: 4.

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# UNITED STATES PATENT OFFICE.

ARCHIBALD B. GARDNER, OF EAST NEW YORK, N. Y.

## IMPROVEMENT IN GRAIN-BAG AND FASTENING.

Specification forming part of Letters Patent No. **217,362**, dated July 8, 1879; application filed May 1, 1879.

*To all whom it may concern:*

Be it known that I, ARCHIBALD B. GARDNER, of East New York, in the county of Kings and State of New York, have invented a new and useful Improvement in Grain-Bag and Fastening, of which the following is a specification.

Figure 1 is a side view of a grain-bag to which my improvement has been applied. Fig. 2 is a side view of the same, shown as arranged for filling. Fig. 3 is a top view of the same, the fastening-cords being shown as loosened. Fig. 4 is a detail section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish improved grain-bags which shall be so constructed that they may be readily fastened and unfastened, filled, emptied, and handled, and which shall be simple in construction and reliable in use.

The invention consists in bags having inclined slits formed in their upper ends, forming ears and funnel-shaped mouths, and provided with two rows of eyelet-holes to receive the fastening-cords, and in a peculiar mode of applying a stiffener, all as hereinafter described.

A represents the body of the bag. In the upper part of the bag A, near each side, is formed an inwardly-inclined slit, forming ears $a^1$ and a funnel-shaped mouth, $a^2$, through which the grain is introduced and discharged.

The inner edges of the lugs or ears $a^1$ are turned in and seamed together. The inclined edges of the funnel-mouth $a^2$ are also turned in and seamed together.

The ears $a^1$ are stiffened by a cord, B, sewed into them along their side edges, as shown in dotted lines in Fig. 2, and the said ears are closed against the entrance of grain by an inclined row of stitches, $a^3$, as shown in Fig. 2.

In the bag A are formed two rows of eyelet-holes, C, one above and the other below the base of the funnel-shaped mouth $a^2$, and which are strengthened by metallic eyelets secured in them.

In closing the bag, the mouth $a^2$ is turned or folded over to bring the two rows of eyelet-holes C directly over each other, as shown in Figs. 1 and 4, and two cords, D, are passed through the said eyelet-holes C, the inner ends of the cords D projecting upon the opposite sides of the middle part of the bag A, and their outer ends projecting upon the same side or upon the opposite sides of the side parts of the said bag A.

The cords D have knots formed upon their ends to prevent them from being drawn out of the said eyelet-holes C.

The outer parts of the cords D have second knots formed upon them at a little distance from their ends, so that the said ends may always project a little, for convenience in grasping them to draw the cords outward sufficiently to allow the mouth $a^2$ to be opened in filling and emptying the bags.

The mouth of the bag A is stiffened, and the fastening made more secure, by a stiffener, E, passing across the side of the said bag between the two rows of eyelet-holes C, and over which the mouth $a^2$ of the bag A is folded when closing it, as shown in Fig. 4, the said stiffener E being kept in place by the cords D, as shown in Fig. 2.

The stiffener E may be made of cord, and may be a continuation of the ear-cords B, and this construction I prefer, as being stronger; or it may be made separate, or it may be made of wood, metal, or other suitable material.

In case the stiffener E be made of a rigid material, it should be made with one or more joints, to allow the mouth of the bag to be opened freely.

When the bag A has been filled, the funnel-shaped mouth $a^2$ is folded over, and the inner ends of the cords D are drawn upon and are then tied over the fold of the said mouth $a^2$, as shown in Fig. 1.

To empty the bag, the cords D are untied, and their outer ends are drawn upon until their outer and inner ends project about equally. The folded mouth $a^2$ is then straightened out, and the grain will flow out freely when the bag is inverted; or the sides of the mouth $a^2$ may be drawn apart before the bag is inverted.

The device may be formed upon a narrow strip of cloth, about six inches wide, and sewed

at its lower edge to the mouth of an ordinary bag, so that the bags already made may be utilized.

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

1. Bags A, having inclined slits formed in their upper ends, forming ears $a^1$ and funnel-shaped mouths $a^2$, and provided with two rows of eyelet-holes, C, to receive the fastening-cords D, substantially as herein shown and described.

2. The stiffener E, arranged to pass across the side of bag, between the rows of eyelets, and under the fold of mouth, as shown and described.

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Witnesses:

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