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BAG FOLDING MACHINE

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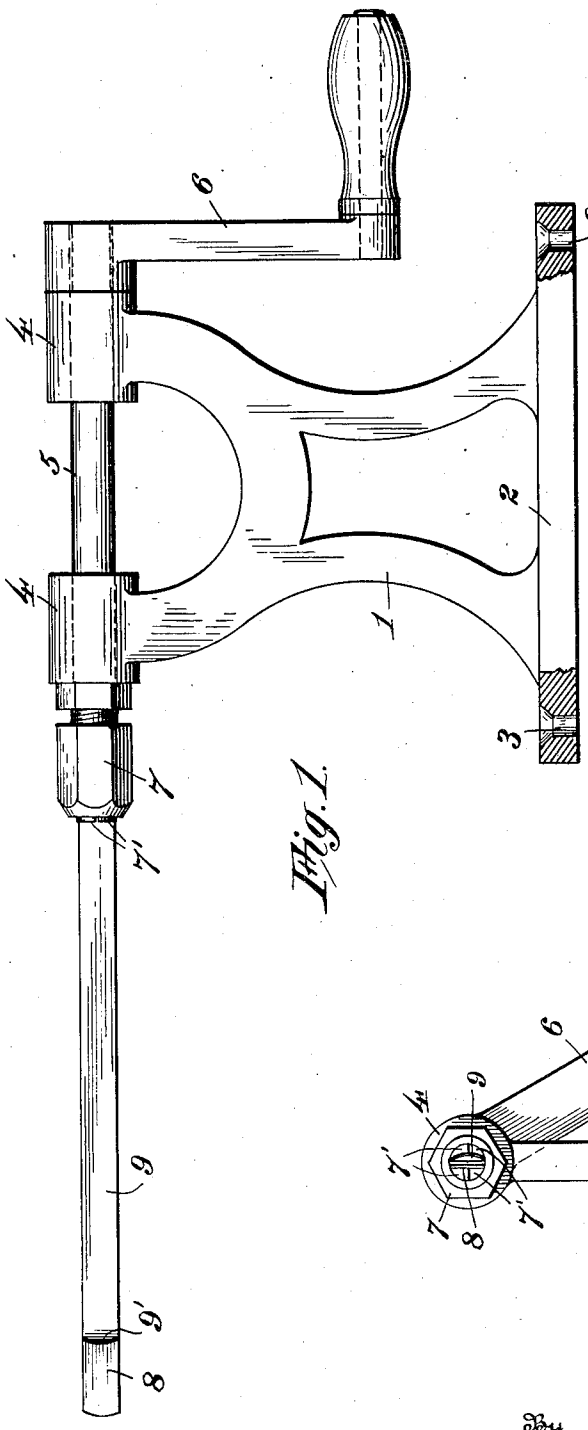


Fig. 1.

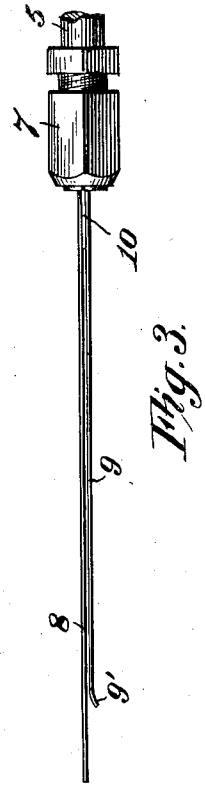


Fig. 3.

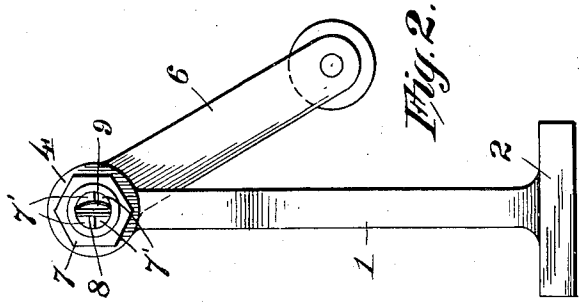


Fig. 2.

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BAG FOLDING MACHINE

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7 Claims. (Cl. 93—2)

My invention relates to bag folding machines, that is, to devices for folding the end of a bag or similar receptacle after the same has been filled with a commodity.

At the present day many commodities, particularly eatables, are furnished to the trade in bags, frequently of "cellophane" or the like; and the open end of the bag is folded over one or more times and usually secured by means of a staple or staples. The object of my invention is to provide a device by means of which the ends of a filled bag or package may be quickly, neatly and uniformly folded prior to stapling. Other objects of my invention are to provide a device of the class mentioned which shall be of simple construction, easy to operate and which will not readily get out of order. Other objects will appear hereinafter.

With these objects in view, my invention consists generally in a suitable frame provided with bearings, a shaft mounted in said bearings and provided at one end with a chuck and a pair of spring fingers between which the end of the bag is to be inserted, and means for rotating the shaft and the fingers. My invention further consists in arranging the fingers so that the end of one will project beyond that of the other to facilitate the insertion of the bags. My invention further consists in various details of construction and arrangements of parts all as will be fully described hereinafter and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawing forming a part of this specification and in which—

Fig. 1 is a side elevation of a bag folding machine embodying my invention,

Fig. 2 is an end elevation of the same, and

Fig. 3 is a view of the fingers and chuck taken at substantially right angles to the position illustrated in Fig. 1.

Referring now to the drawing 1 indicates the frame of the device which is provided with a suitable base 2 preferably having apertures 3 for the reception of fastening means for securing the machine to a bench, table or the like. The frame 1 is provided at its top with suitable bearings 4 in which is rotatably mounted a shaft 5 having fixed to one end thereof a crank 6 by means of which the device may be manually operated.

The other end of the shaft from the crank 6 is provided with a chuck 7 in which are mounted the ends of the folding fingers 8 and 9. Preferably the chuck is of a type having four jaws 7', as illustrated in Fig. 2, so that the ends of the fingers may be readily received between the opposite pairs. The fingers 8 and 9 are preferably formed of long narrow strips of spring steel, and the end of the finger 8 projects beyond the end of finger 9 to facilitate the insertion of the end of the bag between them. To further facilitate the insertion of the bag, the end of the finger 9 is slightly bent outwardly as at 9'. See particularly Fig. 3. Arranged between the inner or chuck end of the fingers is a spacing member 10 which is of sufficient thickness to permit the end of the bag to be inserted between the fingers without springing them out of parallelism. The resiliency of the fingers 8 and 9 facilitates the entry of the bag between them and also permits them to be drawn closely together when the shaft is turned, thereby providing a neat, sharp fold.

In using the device the open end of the filled bag is inserted between the fingers by applying the same against the projecting end of the finger 8 and then sliding the same longitudinally until it is between the fingers. The crank is then given one or more turns which folds the end of the bag neatly and uniformly; after which the bag is removed by slipping the same from the ends of the fingers. The bag is then ready to be sealed, as by applying staples through the folded end.

I claim:

1. A device of the class described comprising a shaft, a chuck on the end of said shaft, a pair of elongated fingers of thin flat material closely associated, thereby presenting thin folding edges to receive the end of a bag between them and means for rotating the shaft and fingers, substantially as described.

2. A device as set forth in claim 1 in which the said fingers are of resilient material.

3. In a bag folding machine, a pair of elongated flexible fingers one of said fingers projecting beyond the end of the other and means for manually turning the same to fold the end of a bag, substantially as described.

4. A device as set forth in claim 3 further characterized by having the end of the shorter finger curved outwardly, substantially as described.

5. A bag end folding device of the class described comprising a frame, bearings in said frame, a shaft mounted in said bearings, a chuck on one end of said shaft, a pair of thin elongated fingers fixed in said chuck and extending in alignment with the shaft, one of said fingers projecting beyond the end of the other, and a crank on the opposite end of shaft from said chuck, substantially as described.

6. A device as set forth in claim 5 further characterized by a spacer member arranged between the inner ends of said fingers and of substantially the thickness of the bag end, substantially as described.

7. A device as set forth in claim 5 in which the fingers are formed of parallel strips of spring material and in which the end of the shorter finger is bent outwardly, substantially as described.

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