No. 721,926. PATENTED MAR. 3, 1903.

E. TYDEN.

SEALING ATTACHMENT FOR BAGS.

APPLICATION FILED JUNE 12, 1902.

NO MODEL.

Fig. 1.

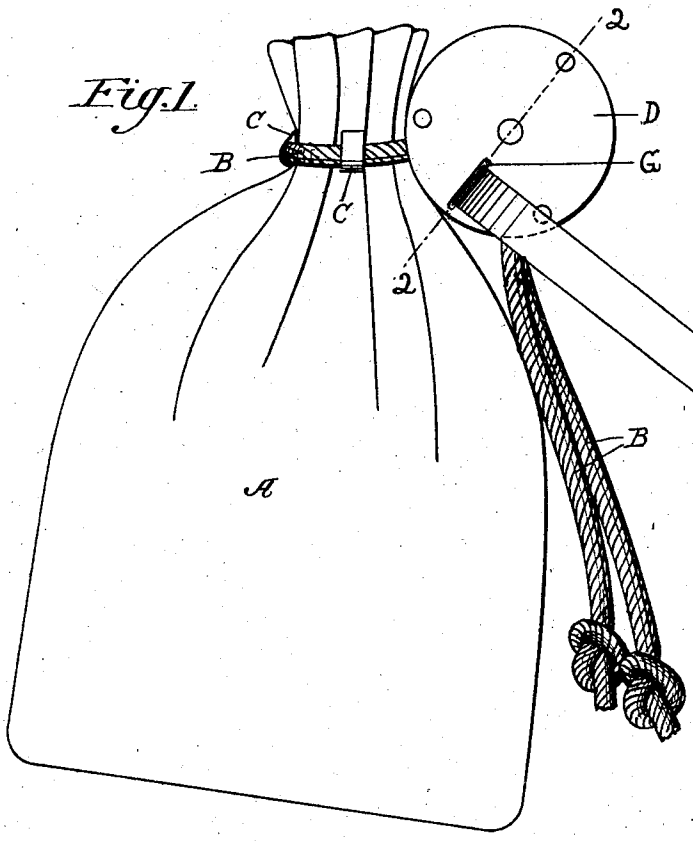


Fig. 2.

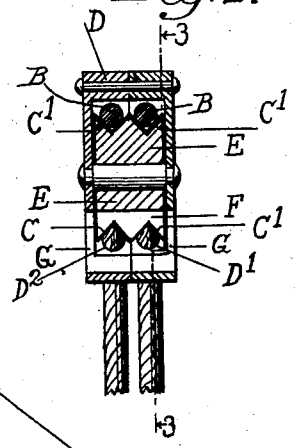


Fig. 3.

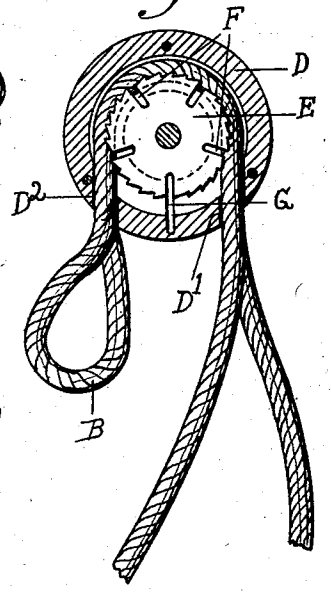
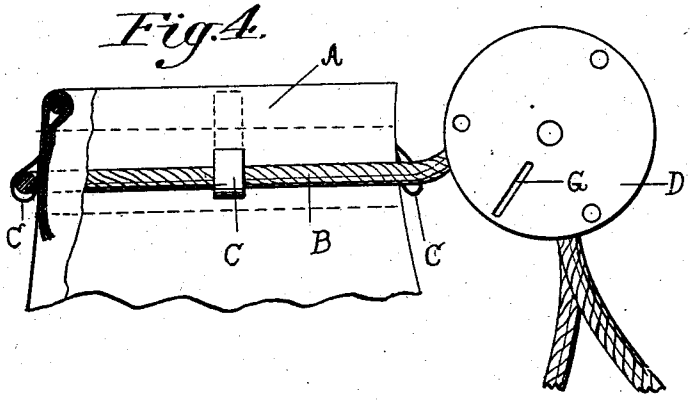


Fig. 4.



Witnesses.
Weston B. Lazear.
Edward T. Wray

Inventor:
Emil Tyden
by Burton Burton
his Atty's

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EMIL TYDEN, OF HASTINGS, MICHIGAN.

SEALING ATTACHMENT FOR BAGS.

SPECIFICATION forming part of Letters Patent No. 721,926, dated March 3, 1903.

Application filed June 12, 1902. Serial No. 111,252. (No model.)

To all whom it may concern:

Be it known that I, EMIL TYDEN, a citizen of the United States, having residence at Hastings, Michigan, have invented certain new and useful Improvements in Sealing Attachments for Bags, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an improved device for closing and securing the mouth of a bag and providing in the securing device means by which it may be sealed—that is, connected with a seal which will have to be broken before the bag-fastening can be released.

It consists in the features of construction which are specified in the claims.

In the drawings, Figure 1 is a perspective view of a bag having its mouth closed by a fastening and the fastening secured by a seal, the form of seal represented being a familiar form of self-locking strap-seal. Fig. 2 is an axial section through the securing device at the line 2 2 on Fig. 1. Fig. 3 is a section at the line 3 3 on Fig. 2. Fig. 4 is a partly-sectional detail elevation showing the top portion of the bag with securing-cord and fastening device, the bag being partly broken away and shown in section at one side.

The bag A has connected to it at the neck or point at which it is to be tied a cord or cable B, which is secured to it in any desired manner to prevent it from being slipped off over the end of the bag after it is tied, as by the loops C C C, secured on or formed in the bag, or reliance may be placed upon the corded mouth of the bag to prevent the cord from being slipped over the end after it is drawn tight around the neck, or both of these expedients may be employed, as shown in the drawings. In whatever manner the seal is secured to the bag or whatever means are provided for preventing it from being slipped off over the end of the latter the ends of the cord are passed through the case of the sealing attachment D, being threaded in through one of the holes D′ and out through a corresponding hole D^2, passing around the wheel E within the case and lying in the grooves C′ C′, with which the periphery of the wheel is provided. The wheel, beside being grooved, is serrated, the serrations being preferably ratchet-shaped—that is, with one abrupt and one sloping shoulder, as seen in Fig. 3, the abrupt shoulder being arranged to face forward in the direction in which the wheel will be rotated in passing the cords through the case from the aperture D′ to the aperture D^2—that is, in the direction in which they would be drawn to tighten the cord around the neck of the bag, so that the teeth will tend to bite the cord and hold it securely in case any attempt is made to draw it back in a direction to slack the cord at the bag-neck unless the wheel is free to rotate when such attempt is made. The wheel has a plurality of slots F F F F F formed through it from side to side—that is, in the direction parallel with the axis—these slots being most conveniently made radial with respect to the axis and spaced from each other such short distances that the cord may be made tight around the mouth of the bag under any circumstances, with the wheel at position at which one of the slots registers with the corresponding pair of slots G G in the opposite side walls of the case. When the cord is thus drawn tight on the neck of the bag and a slot of the wheel is in line with the slots of the case, the seal H, having a strap thrust through the slots in case and wheel and locked in the manner for which the seal is arranged, it will be seen that the cord cannot be drawn in the direction which would rotate the wheel—that is, the direction which would slack the cord at the throat of the bag without rupturing the seal-strap—and this is the purpose sought to be accomplished by the structure.

It will be observed that the tightening might be effected by drawing one end of the cord only, the other end being fast to the case, and it will be observed that in fact both ends are fast in the case in the sense and to the extent that they cannot be withdrawn without breaking the seal. I do not limit myself to construction in which there are two grooves in the wheel and both cords are drawn for tightening; but either of the cords may be considered as fast in the case, while the other cord is not only fast, but adapted to be drawn for tightening the cord.

I claim—

1. A sealing attachment for bags comprising a cord for binding the neck of the bag; a

case made fast to one end of the cord; a wheel in the case peripherally grooved, the case being apertured in its periphery to permit the other end of the cord to enter and pass around the wheel in the groove thereof and emerge from the case, the wheel and the case being transversely apertured to admit a seal when an aperture of the wheel registers with those of the case.

2. A bag-sealing attachment comprising a case peripherally apertured for the cord to enter and emerge therefrom; a wheel in the case around which the cord passes within the case, one wall of the path of the cord being serrated ratchetwise, the abrupt shoulders of the serrations facing onward in the direction in which the cord must be drawn to tighten it on the bag; the case having opposite apertures in its side walls, and the wheel having an aperture adapted to register with the case apertures at one position as the wheel rotates; whereby a seal-strap may be inserted through the apertures of the wheel and case to prevent reverse rotation of the wheel to slacken the cord.

3. A bag-sealing attachment comprising a cord to close the mouth of the bag; a case peripherally apertured to permit the cord to enter and emerge; a wheel within the case peripherally grooved and serrated ratchetwise, affording lodgment for the cord, the case being closely fitted around the wheel to cause the cord to be crowded into the serrated groove in passing about the wheel, the abrupt shoulders of the serrations facing onward in the direction in which the wheel rotates to tighten the cord, the case having opposite apertures for the seal-strap, and the wheel having an aperture that registers with the case-aperture at one position.

4. A bag-sealing attachment comprising a cord for closing the mouth of the bag; a case secured to one end of the cord, peripherally apertured to permit the other end of the cord to enter and emerge; a wheel within the case grooved to afford lodgment for the cord, and around which the cord passes from the entering to the emerging point, the cord being adapted to fit closely between the periphery of the wheel and the encompassing wall of the case, and one of said inclosing elements being serrated ratchetwise in a direction to resist the slacking of the cord, the case having opposite apertures for a seal-strap, and the wheel having a plurality of apertures adapted to register with the case-apertures at short intervals in the rotation of the wheel.

5. A bag-sealing attachment comprising a cord for closing the mouth of the bag; a wheel having two peripheral grooves and a case within which such wheel is inclosed, the case being peripherally apertured to permit the cord to enter and lodge in the groove of the wheel and emerge after passing about the wheel, the grooves and the encompassing wall of the case forming a close-fitting path for the cords, the cord-grooves in the wheel being constructed to prevent the cord from slipping on the wheel, the case having opposite apertures adapted to admit a seal-strap, and the wheel having a plurality of apertures adapted to register one at a time with said case-apertures as the wheel is revolved in the case.

In testimony whereof I have hereunto set my hand, in the presence of two witnesses, at Hastings, Michigan, this 7th day of June, 1902.

EMIL TYDEN.

In presence of—
A. C. BROWN,
FRED W. STEBBINS.