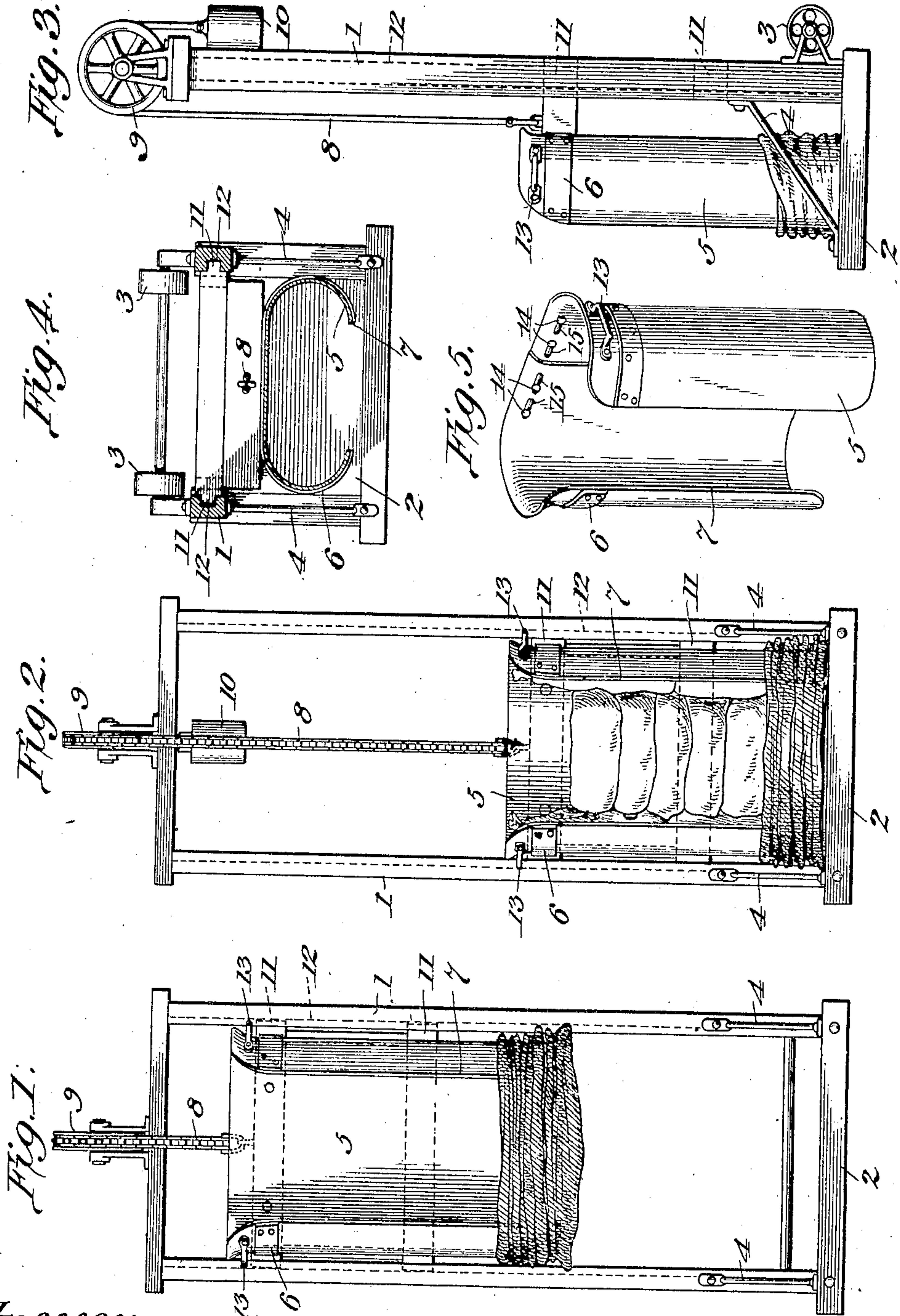


No. 878,342.

PATENTED FEB. 4, 1908.

G. N. CAMPBELL.
BALING DEVICE.

APPLICATION FILED JUNE 6, 1907.



Witnesses:

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By

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UNITED STATES PATENT OFFICE.

GAVIN NEWELL CAMPBELL, OF EVANSVILLE, INDIANA.

BALING DEVICE.

No. 878,342.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed June 5, 1907. Serial No. 377,429.

To all whom it may concern:

Be it known that I, GAVIN NEWELL CAMPBELL, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Baling Devices; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to means for facilitating the packing of sacks of flour or other articles of merchandise whatever character the same may be in bags for transportation.

It has for its object to provide a device in which the articles may be placed in position with ease and expedition and compactly without attention from more than one operator, and then be removed while at the same time the inclosing bag may be drawn up around the articles and tied or otherwise closed so as to hold the articles in the position in which they have been packed.

To the accomplishment of the foregoing and such other objects as may hereinafter appear the invention consists in the features hereinafter described and then sought to be clearly defined by the claims, reference being had to the accompanying drawing forming a part hereof, and in which

Figure 1 is a perspective of the device with the filling tube raised, and having a bag folded about its lower portion, preparatory to being lowered for filling; Fig. 2 is a perspective showing the tube in its lower position and partially packed, say with sacks of flour; Fig. 3 is a perspective of an expandible form of filling tube. Fig. 4 is a cross section through the machine; Fig. 5 is a perspective of the filling tube.

In the drawing, the numeral 1 designates a frame made of wood or other material and provided with a base 2, and having wheels 3 at its rear, the frame and base being braced by rods 4.

Arranged to slide on the frame is a tube 5 which may be circular or of any other shape in cross section but in the illustration given is oval in cross section. This tube is preferably made of sheet metal and provided with strengthening bands 6, and formed with

an open face 7. This is suspended between the upright members of the frame by a cable or chain 8 which passes over a pulley 9 at the top of the frame and has attached to its end a counterbalancing weight 10. The tube may be guided between the upright members of the frame in any suitable manner. For instance, the tube may have tongues 11 projecting beyond its opposite sides and fitting in grooves 12 formed in the faces of the upright members of the frame, although I am not confined to such means.

In operation, the tube is raised and a bag of burlap or other material is drawn over the lower portion of the tube. The tube is then lowered until it stands upon the platform or base of the frame, and the bag stands in folds around the lower part of the tube so as to leave the open face of the tube uncovered. The sacks of flour or other merchandise to be packed is then placed inside the tube through the open face thereof, the open face enabling the articles to be easily inserted and adjusted into position and pressed so as to be compactly packed. After the tube is filled, the bag is drawn up around the tube and the latter raised so as to be withdrawn from around the packed articles, leaving the latter covered and inclosed only by the bag in which they will be transported. The bag is then tied and removed from the platform and another one placed around the raised tube which is then lowered and packed as before.

The tube may be provided with handles by which it may be easily manipulated. The tube is easily raised and lowered as the counterbalancing weight makes it easy so to do, and will sustain it at any position to which it may be raised or lowered. While it is preferred to curve or taper the corners at the top and bottom of the tube at its open face yet the same is not necessary and it need not be done. When it is desired to move the baling device from one place to another it is easily done by merely tilting it backwards and moving it upon the wheels which will support it.

While the tube may be made in one piece and different sizes may be used for different articles, yet it can be made expandible by forming it in two parts and having one slidable upon the other so as to be contractible and expandible. For instance as shown in Fig. 5 it is divided longitudinally

so as to be transversely contracted or expanded by moving one part towards or away from the other and holding the parts in their adjusted positions by bolts 14 passing
5 through slots 15 made in the parts.

It will be observed that the open faced tube is not a mere bag mouth opener but is a baling chamber having substantially the dimensions of the bag in which the packed
10 articles are to be shipped and in which the articles are packed and given and retained in their form until the shipping bag is drawn up around them, the shipping bag remaining folded around the lower portion of the baling
15 chamber until the articles have been packed in the baling chamber and the latter is ready to be withdrawn.

While the device is especially well adapted for baling sacks of flour for transportation
20 yet it can be used for packing or baling cakes of ice in bags for shipment, or in fact any other article of merchandise to be packed or baled for shipment. It saves much time in baling the articles and requires only one
25 man for its operation, and is strong and durable and not liable to get out of working order.

While I have illustrated and described the preferred details of construction of the
30 several parts yet I do not mean to confine myself thereto.

Having described my invention and set forth its merits, what I claim is:—

1. A device for baling articles in a recep-
35 tacle for shipment, comprising a tube sub-

stantially of the dimensions of the receptacle to be filled, having an open side and open bottom permitting the articles to be supported without resting upon the tube, said tube serving to retain the articles in position
40 while being baled and its open side permitting the articles to be introduced there-through and stacked in the tube, and means by which the tube may be withdrawn from around the bale, substantially as described. 45

2. A baling device comprising a frame and a slidable open face tube constituting a baling chamber in which to stack and hold articles while being baled, substantially as described. 50

3. A baling device comprising a frame, a slidable open face tube constituting a baling chamber in which to stack and hold articles while being baled, and a counterbalance connected with the tube, substantially as de- 55 scribed.

4. A baling device comprising a frame, a platform carried by the frame, and a slidable open face tube constituting a baling chamber in which to stack and hold articles while
60 being baled, said tube being sustained adjacent to said platform, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GAVIN NEWELL CAMPBELL.

Witnesses:

BEULAH NIEMYER,
CARRIE SCHIEFFERSTEIN.