July 1, 1947. D. H. STOREY 2,423,209

PAPER BALER

Filed May 20, 1944

Fig. 1.

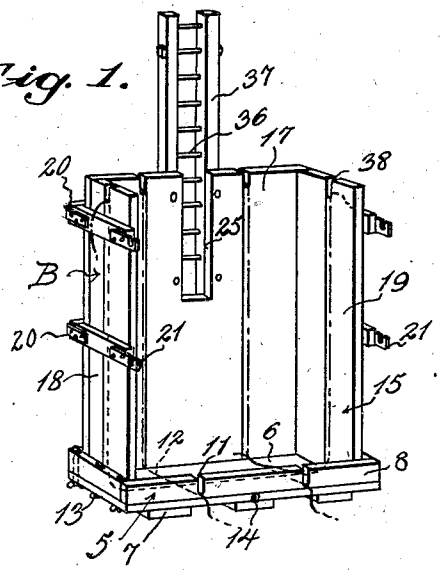


Fig. 2.

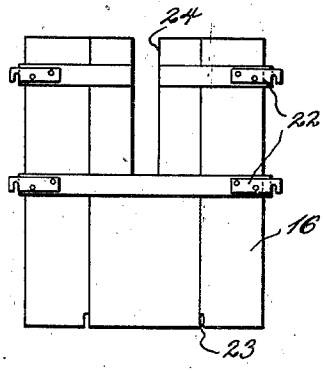


Fig. 4.

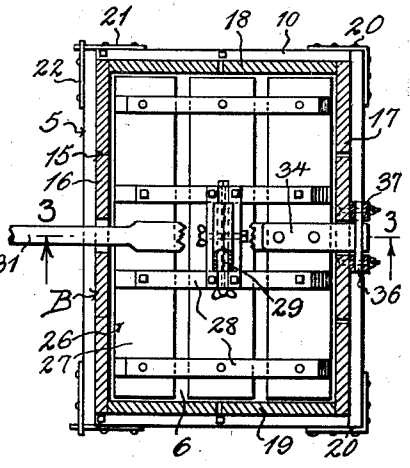
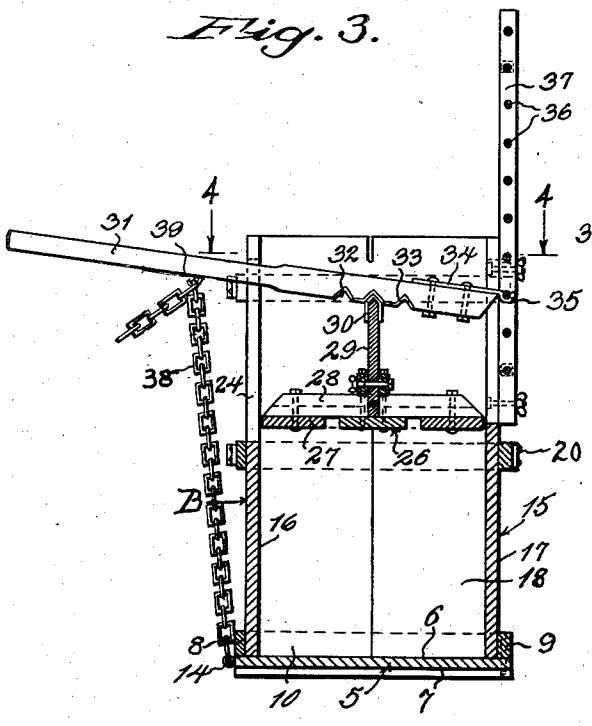


Fig. 3.



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PAPER BALER

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1 Claim. (Cl. 100—4)

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This invention appertains to presses and more particularly to a novel baling press particularly adapted for use in homes for baling waste paper and the like.

One of the primary objects of my invention to provide a household baling press, which will be of a light, compact order and one which can be easily operated by a woman or other person for making a neat tight bale of waste paper, the body of the press itself acting as a bin for the collection of waste paper.

Another salient object of my invention is to provide a baling press which can be effectively used in households or small business establishments, that can be quickly knocked down and folded into a small compass for shipping and storing.

A further important object of my invention is to provide novel means for assembling the walls of the body of the press on the base to form a rugged structure and novel means for forming and operating the compressing plunger.

A still further object of my invention is to provide a domestic waste paper baling press which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement, and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawing, in which drawing:

Figure 1 is a perspective view of the body of the press with the front wall thereof removed.

Figure 2 is a front, elevational view of the front wall.

Figure 3 is a vertical, sectional view through the complete press showing the same in use, the section being taken substantially on the line 3—3 of Figure 4 looking in the direction of the arrows.

Figure 4 is a horizontal, sectional view through the press taken on the line 4—4 of Figure 3 looking in the direction of the arrows and with the lever 31 partly broken away.

Referring to the drawing in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter B generally indicates my improved baling press and the same includes a base section 5 and a collapsible body section 15.

The baling press B is preferably formed from light inexpensive lumber, such as is commonly employed in the construction of shipping boxes,

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but obviously any desired type of material can be employed that is best suited for the purpose. In fact, after the war, it is contemplated of making the press from metal.

The base 5 includes a floor 6 reinforced by transversely extending spaced cleats 7 on which the base can rest on the floor. Secured to the upper surface of the floor 6 around the marginal edges thereof are upstanding front and rear flanges or strips 8 and 9 and side flanges or strips 10. If preferred, the rear flange or strip 9 can extend a greater distance above the floor than the front and side flanges. It is to be noted that notches 11 can be formed in the front strip or flange 8 for the reception of baling cord or twine 12. Bolts 13 can be utilized for connecting the flanges or strips in place on the floor 6 but nails can be employed for this purpose, if so desired. The base is also provided with an eye 14, the purpose of which will be later described.

The body 15 of the press includes a removable front wall 16, back or rear wall 17, and side walls 18 and 19.

As illustrated, these walls are formed from vertical boards and the boards are united by horizontal cross braces. The rear wall 17 and the side walls 18 and 19 are united by removable angle irons 20, so that the side walls can be placed on top of the rear wall when the walls are detached from the base. When the side walls are placed over the rear wall, this unit can be placed on top of the base and the front wall can then be placed on top of the side walls. This forms a compact bundle for shipping and storing.

As is clearly shown in Figures 1, 3, and 4, the body is placed on the floor 6 of the base 5 in abutting relation with the flanges or strips of the base.

The side walls 18 and 19 carry forwardly projecting hooks 21 and the front wall 16 carries mating laterally projecting hooks 22. This front wall can be slipped on the base against the front edges of the side walls 18 and 19 with the hooks 22 engaging the hooks 21. This will form a convenient sturdy structure, which will unite all of the walls of the body and at the same time permit the quick removal of the front wall to lift out a completed bale from the press as will be later described. The lower edge of the front wall is provided with cord receiving notches 23 which are adapted to register with the notches 11 when the front wall is in operative position.

The front wall 16 and the rear wall 17 are respectively provided with centrally located vertical slots 24 and 25. A plunger 26 is utilized for pressing the waste paper collected in the body

of the press and this plunger snugly fits in said body for sliding movement. The same can include a plurality of presser boards **27** rigidly connected by cross strips **28**. Firmly secured to the central presser board and adjacent the cross strips **28** is a fulcrum board **29**. The upper edge of the fulcrum board can be reinforced by a wear shoe **30**.

The presser plunger **26** is operated by a hand lever **31** which is adapted to protrude from the front of the press through the slot **24**. The lower face of the lever is provided with a plurality of fulcrum notches **32**, any one of which can receive the upper edge of the fulcrum board **29**. The lever can be reinforced at this point with a wear iron **33**. The rear end of the lever carries a hook **34** having a semi-circular bill **35**. This hook is adapted to engage any one of a plurality of fulcrum pins **36**. The fulcrum pins **36** are arranged in spaced parallel relation and are carried by uprights **37** which are firmly, but removably, secured to the rear wall **17** on each side of the slot **25** therein. The upper edges of the rear and side walls can be provided with tying cord receiving notches **38**.

In use of my baling press, the same is assembled in the manner shown in the drawing and the press is placed at a convenient point in the household, such as in the kitchen or cellar. Transverse and longitudinal cords are placed on the floor **6** of the base and the cords are brought up the sides and into the notches formed in the rear and side walls of the press and the front strip **8** of the base. A wrapping sheet, such as a piece of newspaper, is now placed on the floor of the base and the press can now be used as a bin for the reception of waste paper.

When sufficient paper has been collected, the plunger **26** is placed on top of the waste paper and the lever **31** is now brought into play. The hook **34** is placed over the desired pin and lever is brought over the fulcrum board. Pressure is now applied on the outer end of the lever and the waste paper can be conveniently pressed into a compact bale. If desired, the plunger can be removed and more paper added, and as the bundle is made, the hook can be moved down to another pin **36**.

The lever **31** can be held in a lowered position with the plunger against a compressed bale by the use of a flexible chain **38** carried by the eye **14**. A desired link of the chain can be hooked over a hook **39** carried by the lever.

When the desired quantity of waste paper has been collected, a cover sheet, such as a folded sheet of newspaper is placed over the top of the waste paper and the cords from the back are brought over the waste paper to the front and the waste paper is finally compressed by the plunger and the lever, and the lever is held down in its compressing position by the chain **38**. The

front wall **16** is now removed and the front and back cords are tied. The chain **38** is released and the plunger **27** and the lever **31** are removed and the side cords are now tied together. The baler is now removed and a tight compressed bundle will be had.

Particular attention is directed to the notches **32** in the lever. Should the bale being formed be high in front, the upper end of the lever rest plate **29** is placed in the front notch **32**. This gives greater pressure on the front of the bale. If the paper in the press is fairly even, the plate **29** is placed in the middle notch. If the paper is high in the back, the plate **29** is placed in the rear notch.

From the foregoing description, it can be seen that I have provided a simple and durable domestic baling press which can be conveniently operated by the ordinary housewife.

While I have stressed the advantage of my baler for homes, it is to be understood that the baler is just as valuable for small stores, offices, factories or, in fact, anyone needing a small sized baler.

Changes in details may be made without departing from the spirit or the scope of my invention, but what I claim as new is:

In a knocked down collapsible household baling press, a base including a floor and upstanding marginal flanges, a body detachably associated with said base including front, rear and side walls, the lower edges of said walls being adapted to fit against said floor with said walls in abutting relation to said flanges when the body is in its set up position on the base, means removably connecting the side walls to the rear wall, means detachably connecting the front wall to the side walls, whereby the walls of the body when disassembled can be placed flat on said base for shipment, a plunger slidably mounted in the body, when said body is in its set up position, a fulcrum member carried by said rear wall, and a fulcrum lever adapted to engage the fulcrum member and said plunger.

DANIEL H. STOREY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,142,704	Haugh	June 8, 1915
1,760,292	Troth	May 27, 1930
397,917	Hillman et al.	Feb. 19, 1889
1,296,830	Marsh	Mar. 11, 1919
132,486	Pagett et al.	Oct. 22, 1872
944,823	Rohrer, Jr.	Dec. 28, 1909
145,629	Collins	Dec. 16, 1873
921,453	Pilon	May 11, 1909
798,133	Green et al.	Aug. 29, 1905