

J. H. MARSH.

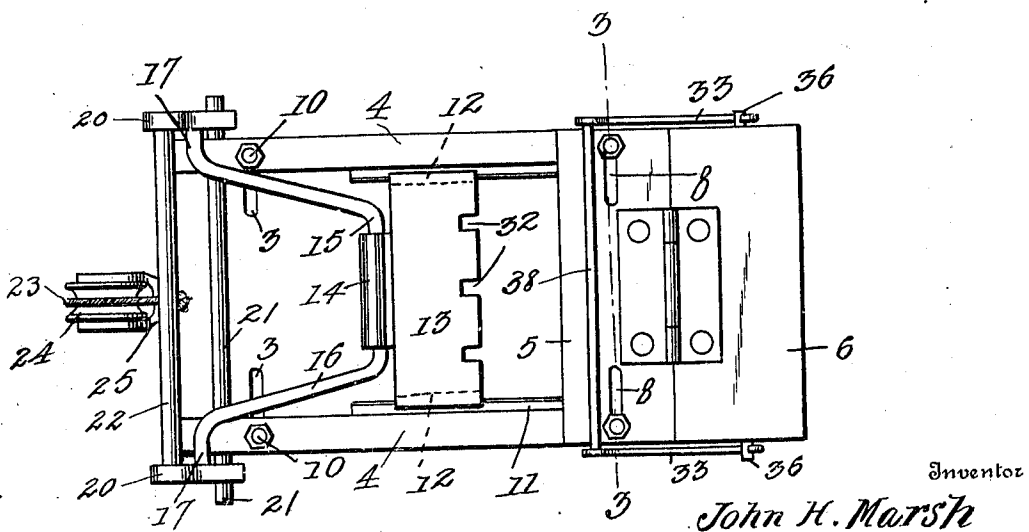
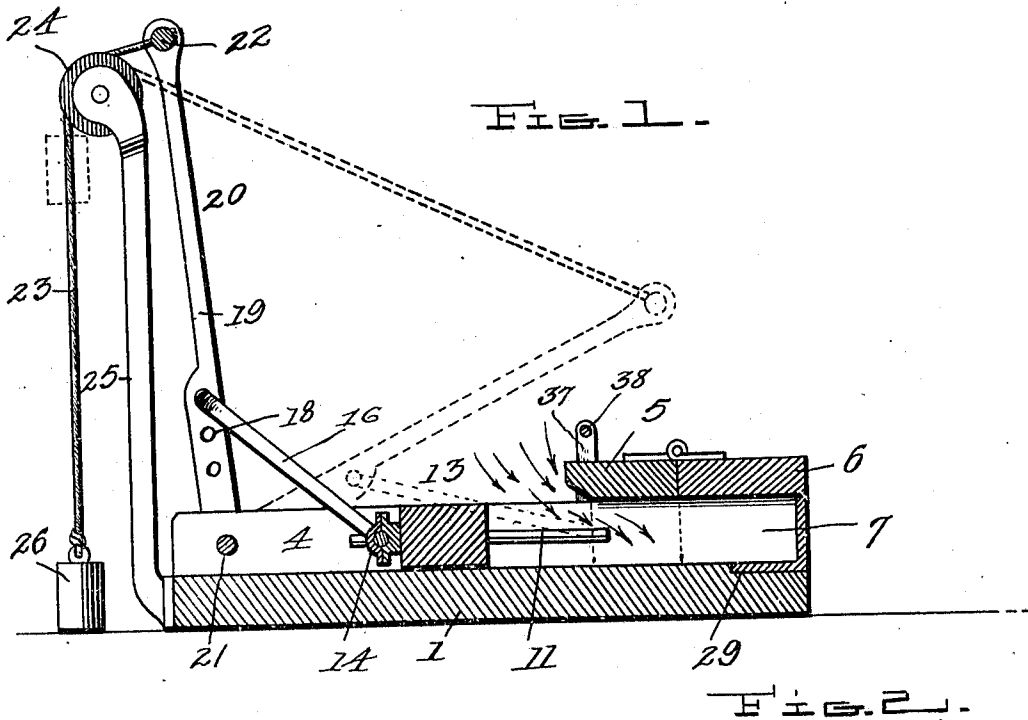
PRESS.

APPLICATION FILED MAY 25, 1909.

953,173.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.



Inventor

John H. Marsh

Witnesses

E. C. Gibson.

James A. Reed.

By Victor J. Evans

Attorney

J. H. MARSH.

PRESS.

APPLICATION FILED MAY 26, 1909.

953,173.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 2.

FIG. 3.

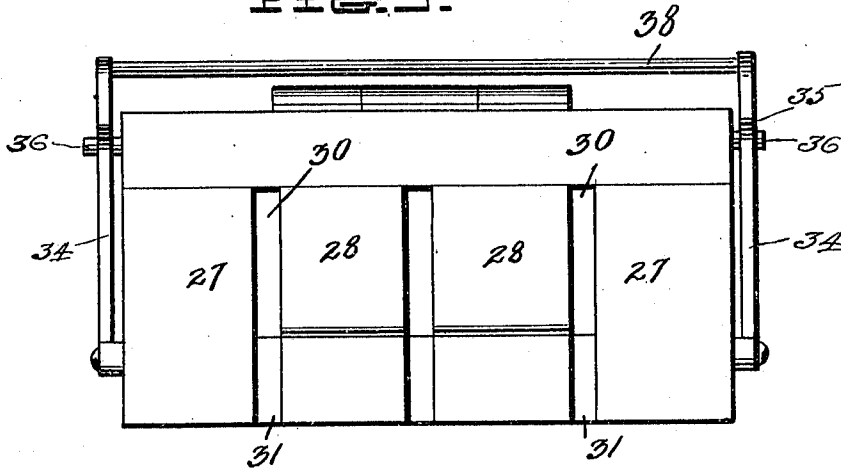


FIG. 4.

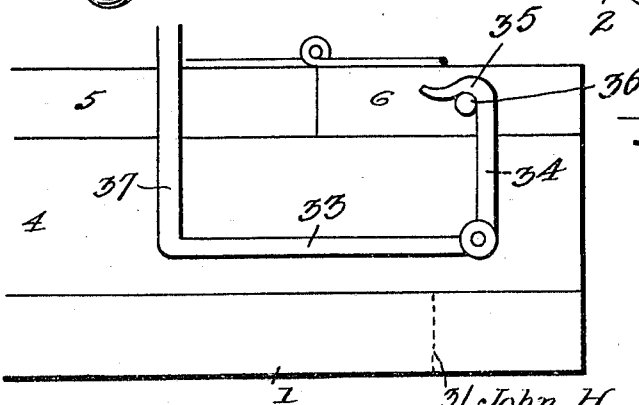
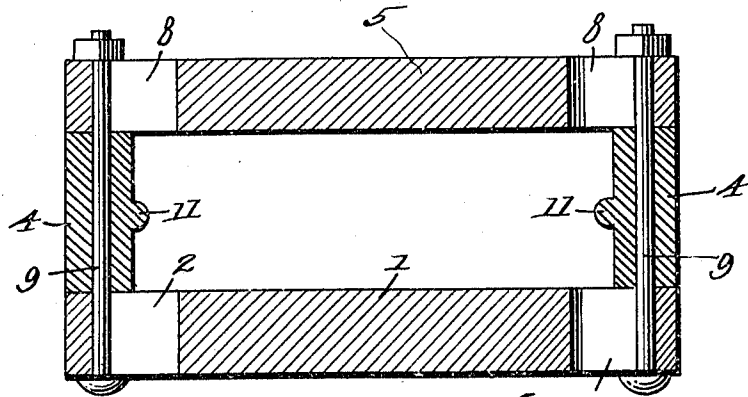


FIG. 5.

Inventor

John H. Marsh

Witnesses

F. L. Gibson

James W. Bell

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

JOHN H. MARSH, OF OSHKOSH, WISCONSIN, ASSIGNOR OF ONE-HALF TO GEORGE H. LE FEVRE, OF OMRO, WISCONSIN.

PRESS.

953,173.

Specification of Letters Patent.

Patented Mar. 29, 1910.

Application filed May 25, 1909. Serial No. 498,133.

To all whom it may concern:

Be it known that I, JOHN H. MARSH, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented new and useful Improvements in Presses, of which the following is a specification.

This invention relates to presses and particularly to those adapted for use in pressing straw, hay or brush into small bundles which may be used and put upon the market as fire starters or kindlers.

A still further object of my invention relates to the fact that the press includes or embodies adjustable means for changing the size of the compressing chamber so as to form bundles of different sizes.

A still further object of my invention relates to the novel and simple form of plunger operated handle which in this instance is provided with means for holding it normally approximately in a vertical position and in convenient reach of the operator of the press.

A still further object of the invention is to provide a press wherein means are provided for accommodating the tying or binding connection for holding a compressed amount of material in package or bundle form.

Other objects and advantages will be apparent as the nature of the invention is better set forth, and it will be understood that changes within the scope of the claims may be resorted to without departing from the spirit of the invention.

In the drawings, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a longitudinal section through the press. Fig. 2 is a top plan view. Fig. 3 is a detail front end view. Fig. 4 is a section taken on the line 3—3 of Fig. 2. Fig. 5 is a detail side elevation of the front end of the press.

As illustrated in the accompanying drawings, the press comprises a floor or base member 1 adapted to be mounted directly upon the surface of the ground and as shown in detail in Fig. 4 the floor or base 1 is provided adjacent to its front end with transversely extending elongated slots 2 and adjacent to its rear end with similar elongated slots 3. Adjustable parallel spaced side members 4 are mounted upon the floor

or member 1 and at the front end the said side members support a transversely disposed bar 5 which is disposed in spaced relation to the floor or member 1 and has hingedly connected thereto a closure 6. The closure 6 is arranged to lie in a plane with the bar 5 and forms therewith and with the floor or member 1 and side members 4 a compression chamber 7 at the front of the press. The bar 5 has formed therein elongated slots 8 disposed immediately above the slots 2 in the floor or member 1. The side members 4 are provided with vertically disposed clamping bolts 9 which have their end portions mounted in the slots 2 and 8. The lower extremities of the bolts are headed as shown and span the walls of the slots 2 upon the bottom of the floor or base 1, and the upper extremities of the bolts are threaded to receive clamping nuts as illustrated which are adapted for frictional engagement with the bar 5. The side members 4, adjacent to their rear ends are provided with clamping bolts 10 which are identical in construction with the bolts 9 and have their lower extremities slidably arranged in the slots 3. The rear edge of the bar 5 is beveled upwardly to facilitate the passage of material into the compression chamber and at the said beveled ends the bar is of such construction that it forms with the floor or base 1 and with the side members 4 a material receiving throat as will be readily understood.

The side members 4 are provided upon their inner faces with longitudinally extending guide ribs 11 arranged to receive the grooved end portions 12 of a plunger 13 provided at its rear end with a box 14 in which the portion 15 of a yoke-shaped link 16 is journaled. The link herein shown is provided with trunnions or pintles 17 which are adjustably mounted in vertical series of passages 18 formed in the side members 19 of an operating handle 20. The operating handle 20 has its side members 19 pivoted upon a shaft or its equivalent 21 carried by the side members 4 of the press. The side members 19 of the handle are connected by a hand gripping or engaging bar 22. The bar 22 has connected thereto the upper extremity of a cable or flexible connection 23 which is passed over the guide pulley 24 revolvably mounted upon a bracket or standard 25 which is secured to the floor

or base member 1 at the rear end. The lower extremity of the connection 23 is secured to a weight 26 which is arranged or adapted to fall by gravity as shown so as to normally hold the side members 19 of the handle 20 approximately in vertical positions and in this manner it is obvious that I arrange the said handle so that it will be in convenient reach at all times of the operator of the press and this construction also provides or allows for the automatic return of the plunger. Normally the plunger assumes the full line position shown in Fig. 1 and has its front end disposed in such spaced relation to the rear end of the bar 5 as will permit the free insertion of material into the compression chamber.

The floor or base 1 has secured thereto in any suitable manner and adjacent to the sides thereof head-forming elements or plates 27 which extend vertically and have their upper edges disposed directly beneath the bottom face of the closure 6 and form a support for said closure in addition to the side members 4. The floor or member 1 is provided with head-forming plates or elements 28 which are preferably of angle form and have portions 29 secured in recessed portions of the floor or base. The head-forming plates 28 have their vertical side edges disposed in spaced relation to the inner vertical side edges of the head-forming plates 27 and form vertical slots 30 which are disposed in line with similar slots 31 formed in the base or floor 1. As illustrated particularly in Fig. 2, the front face of the plunger 13 has formed therein vertically disposed slots 32 arranged in alinement with the slots 30 and 31 previously described.

The base or floor has pivoted thereto at its sides and adjacent to the front end of the press levers 33 provided with portions 34 that have hooked upper extremities 35 removably engaged with horizontally disposed pins 36 carried by the closure 6. The levers 33 have portions 37 that are extended upwardly at the sides of the press and are connected to each other by an operating rod 38. This construction permits of the closure being held effectively in temporarily locked engagement with the side members 4 of the press and prevents opening of the closure during compression of material.

The construction herein shown and described permits of the horizontal adjustment of the side members 4 of the press so that they can be moved toward or away from each other to change the size of the compression chamber 7 in order that bun-

dles or packages of different sizes can be formed.

By providing the side members 19 each with a series of adjusting openings, it will be appreciated that the links 16 can be adjusted so as to change the stroke of the plunger. When the handle 20 is moved in the dotted line position shown in Fig. 1 the material within the chamber 7 is under compression and after a suitable amount of material has been formed into a package, the hooked ends 35 of the levers 33 can be conveniently disengaged from the pins 36 to permit of the closure 6 being raised to its open position. Assuming the plunger to be in the position shown in dotted lines in Fig. 1 the slots 32 will be so located with respect to the slots 30 and 31 so that a binding wire or connection can be conveniently passed around the compressed amount of material. The apparatus herein described is extremely simple in construction, may be manufactured at a relatively low cost and permits of material such as hay, straw, brush or refuse being formed into bundles to be put upon the market as kindling.

I claim:—

1. A press of the character described having a floor or base member, adjustable side members upon the floor disposed in spaced relation to each other, a bar extending across the said side members and slidably connected therewith, a closure carried by the bar adapted to form therewith and with the side members and floor of the press a material receiving chamber, and a reciprocatory plunger slidably mounted upon the floor and adapted for movement into and out of the chamber.

2. A press having a floor provided with a head at one end comprising spaced vertical plates adapted to form a plurality of vertical slots, said floor having a series of slots communicating with the slots formed by said plates, a cross bar disposed above the floor and provided with a closure, said cross bar and closure respectively forming with portions of the press a compression chamber, and a reciprocatory plunger provided upon one face with a series of vertical slots disposed in alinement with the slots formed in the floor of the press and with the slots formed by the spaced plates of the head.

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

JOHN H. MARSH.

Witnesses:

WILBUR E. HURLBUT,
MABEL LA BORDE.