

No. 798,019.

PATENTED AUG. 22, 1905.

A. DEUEL.
BAG HOLDER.
APPLICATION FILED NOV. 1, 1904.

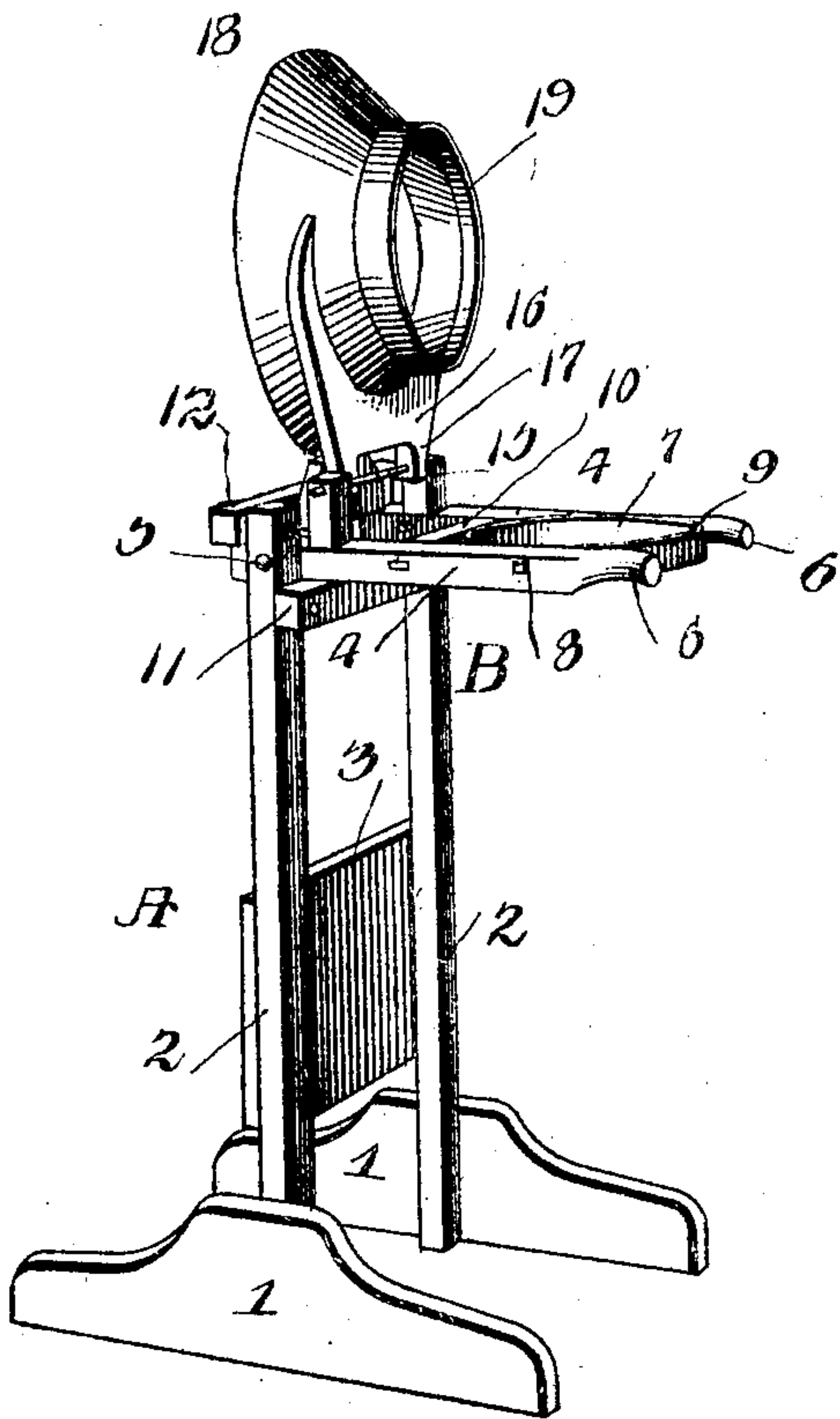


Fig. 1.

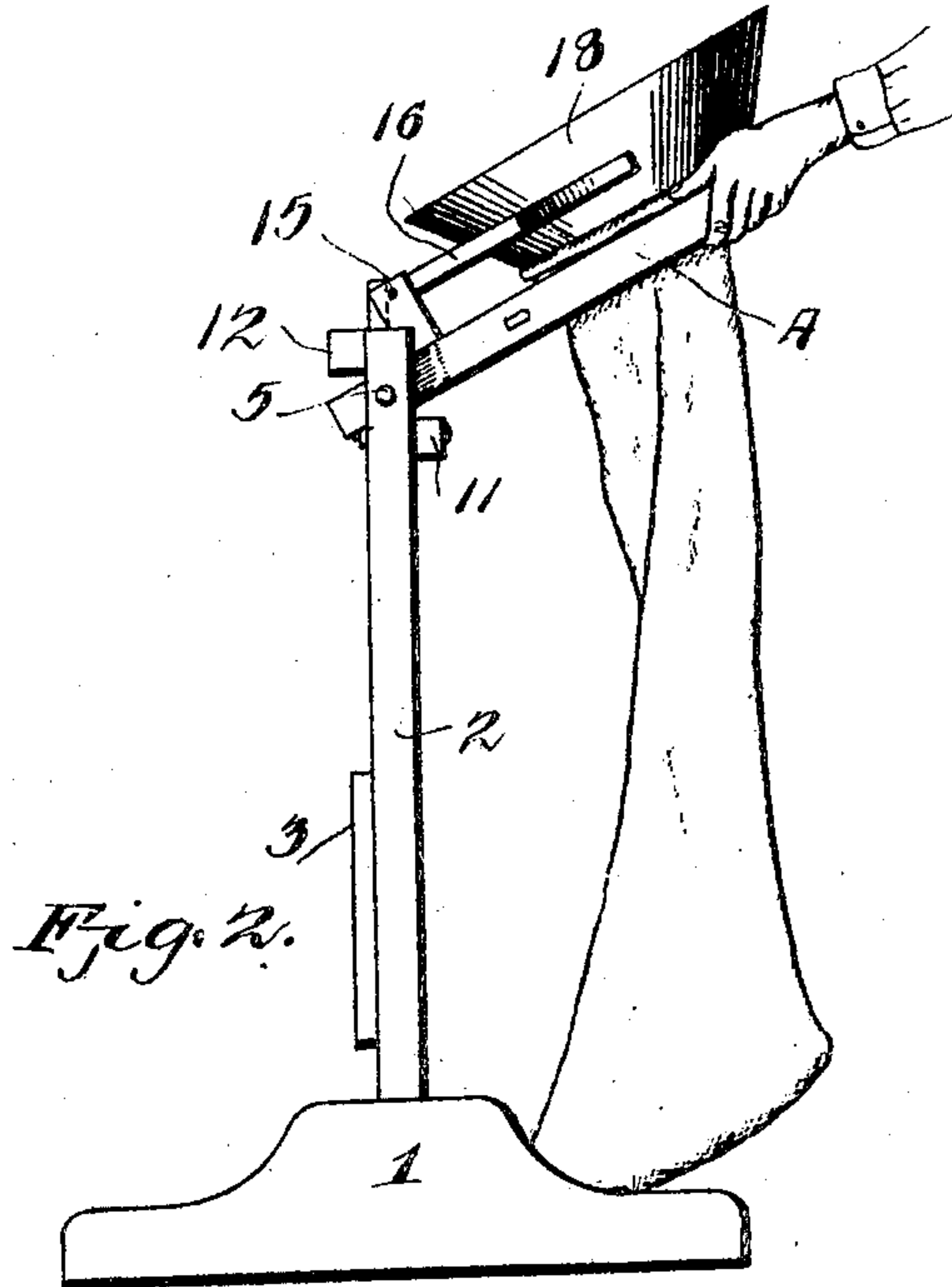


Fig. 2.

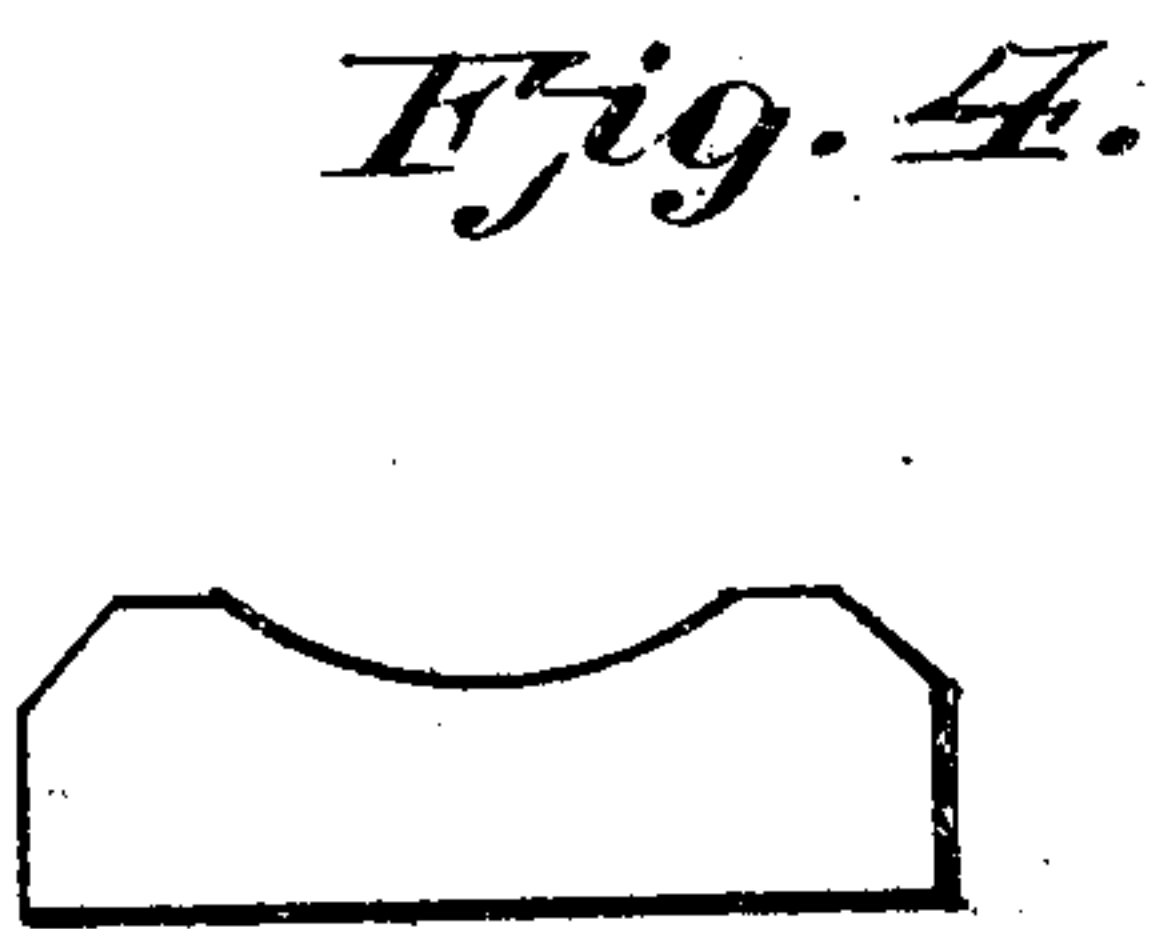


Fig. 4.

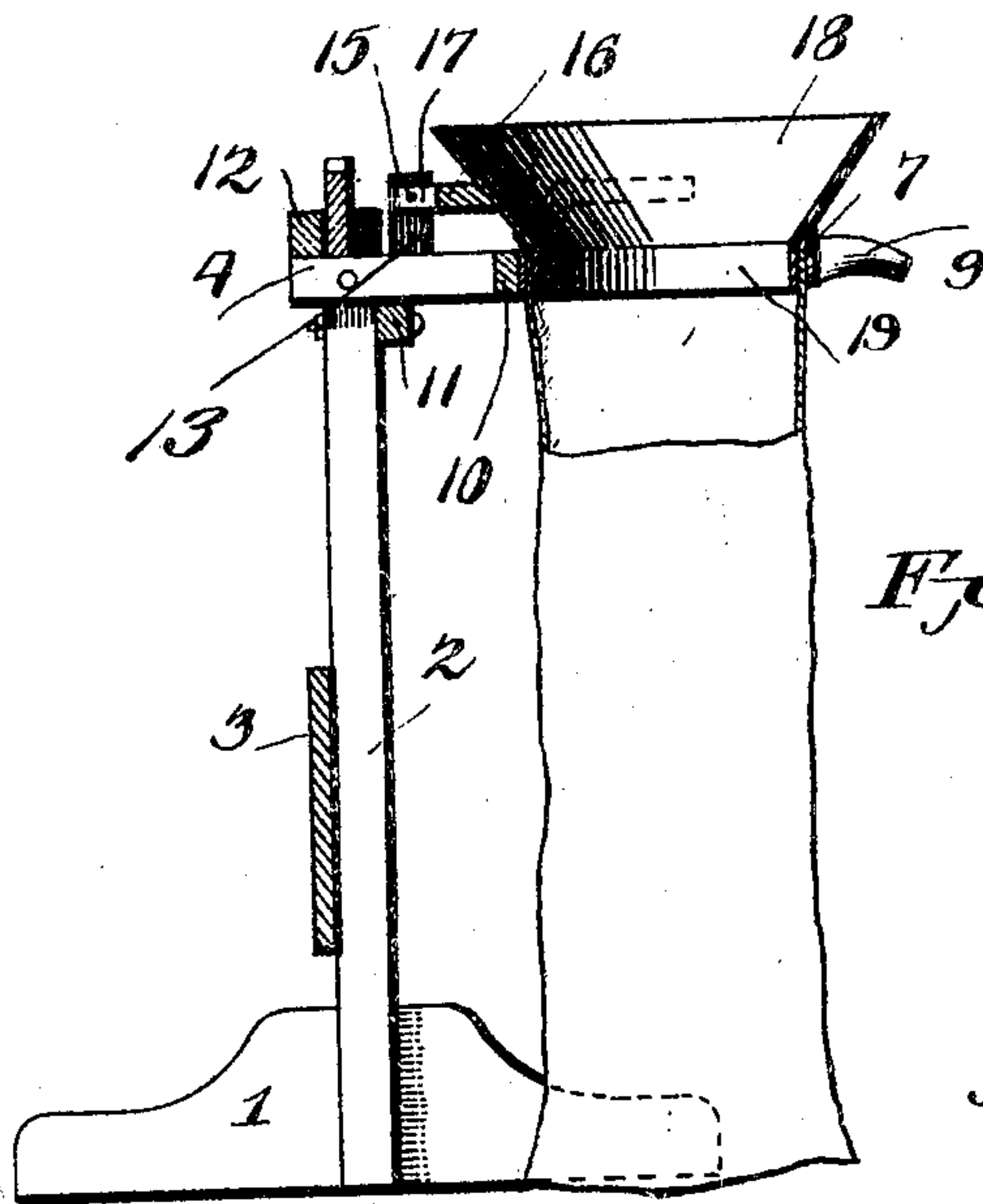


Fig. 3.

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UNITED STATES PATENT OFFICE.

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BAG-HOLDER.

No. 798,019.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR DEUEL, a citizen of the United States, residing at Wayland, in the county of Allegan and State of Michigan, have invented new and useful Improvements in Bag-Holders, of which the following is a specification.

This invention relates to bag-holders or devices of that kind adapted for supporting bags while they are being filled and for shaking the filled bags to cause the contents to assume a desired compactness.

The object of the invention is to provide a device of this kind which is simple of construction, comparatively inexpensive of production, and efficient in use and which embodies novel and improved means for securing the bag in position for filling and shaking the same while it is being filled to cause the material which is being fed therein to become compact.

With this and other objects in view the invention consists of the features of construction, combination, and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a bag-holder embodying my invention, showing the funnel or filling vessel raised and the parts in position to receive the bag to be filled. Fig. 2 is a side elevation of the bag, showing a bag supported thereon and illustrating the operation of shaking the bag. Fig. 3 is a central vertical section of the bag-holder with the shaking-frame lowered and showing the manner in which the bag is clamped in position; and Fig. 4 is a detail view of the rest-block.

Referring now more particularly to the drawings, the letter A designates a supporting-frame, which may be of any preferred form and construction, but which, as shown in the present instance, comprises two sills or base-pieces 1, a pair of legs or standards 2 rising therefrom, and a cross-piece 3, connecting and bracing said legs or standards near their lower ends.

Pivotally mounted upon the upper portion of the legs or standards 2 is a shaking-frame B, comprising parallel side bars 4, extending between the upper ends of the legs and pivoted thereto by bolts 5. The forward ends of the side bars 4 are provided with terminal

grips 6, by means of which said frame may be oscillated in a vertical plane, and disposed between said bars and at a point in rear of said grips is a bag-holding ring 7, fastened in position by means of suitable securing devices 8. The ring 7 is comparatively shallow in depth, so as to allow the mouth of the bag to be inserted therein and project thereabove, and the upper edge 9 of the ring forms a projecting surface, over which the edge of the mouth of the bag is adapted to fold, as hereinafter described. The side bars 4 of the shaking-frame are connected and braced in rear of the ring 7 by a transverse bar or cross-piece 10, and said frame is supported in a horizontal position and limited in its upward and rearward movements by stop-bars 11 and 12, applied, respectively, to the front and rear surfaces of the legs 2 below and above the plane of the pivot-bolts 5, so that the rear end of the shaking-frame A will swing or rock to a desired extent between said bars 11 and 12, as will be readily understood.

From the rear ends of the side bars 4, immediately in advance of the stop-bar 12, rise supporting blocks or uprights 13, in which a transverse rod or shaft 15 is fixedly mounted at its ends. A bracket 16 is bifurcated at its lower rear edge to form short arms 17, which are loosely and pivotally mounted upon said rod or shaft 15 to permit said bracket to swing independent of the frame B. The said bracket carries a funnel or filling vessel 18, which is provided with a depending annular flange or collar 20, which is adapted when the bracket is swung downward to fit into the ring 7 and form a funnel or guide to facilitate the passage of the material to the bag and at the same time clamp the mouth of the bag to the ring 7.

In the practical operation of the invention the parts are normally arranged as shown in Fig. 1, and the mouth of the bag which is to be filled is passed up through the ring 7 and the edge thereof turned outward over the edge 9 of the ring, as shown in Fig. 3. The bracket 17 is then swung downward with the funnel 18 and the flange or collar 19 forced into the open mouth of the bag so as to clamp the latter to the ring 7. The bag is then supported in position to be filled, and the material is entered through the funnel or filling vessel 19. When the bag is nearly filled, or when it is

desired to shake down the contents thereof at intervals in the process of filling, the grips 6 are grasped in the hands of the operator and employed to swing or oscillate the frame B in a vertical plane, and the contents of the bag will be shaken down to the desired compactness. In order to remove the filled bag, the funnel 18 is swung upwardly, thus releasing the bag from engagement with ring 7, whereupon the bag will drop down by gravity and may be removed and the mouth sealed or closed in any approved manner to retain the contents therein. In order to support the filling-funnel when the latter is thrown upward, a rest-block 20 is arranged at the front of and secured to the upper rear stop-bar 12. The upper edge of this block is segmentally notched or cut away to form a recess conforming in shape to and adapted to receive the lower portion of the rim edge of the funnel when the latter is tilted back, as shown in Fig. 1. By this means the funnel when thrown up or tilted back will be supported in a horizontal or substantially horizontal position, thus relieving the pivot-rod 15 and bracket 16 of a portion of its weight, whereby excess strain upon these parts is prevented.

From the foregoing description, taken in connection with the accompanying drawings, the construction and mode of operation of the

invention will be understood without a further extended description.

Changes in the form, proportions, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described the invention, what is claimed as new is—

A bag-filling device comprising a supporting-frame, a shaking bag-holding frame pivotally mounted thereon, a ring carried by said shaking-frame to receive the mouth of the bag, a funnel or filling vessel hinged or pivoted to the shaking-frame and adapted to clamp the bag to the ring, stops upon the supporting-frame to limit the upward and downward movements of the shaking-frame, and a rest-block adjacent to said stops having a concavity to receive the rim edge of the funnel or filling vessel when the latter is swung back, whereby said funnel is positively supported when in inoperative position to relieve its pivotal supports from strain, substantially as described.

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

ARTHUR DEUEL.

Witnesses:

LEE DEUEL,
W. S. ABLETT.