

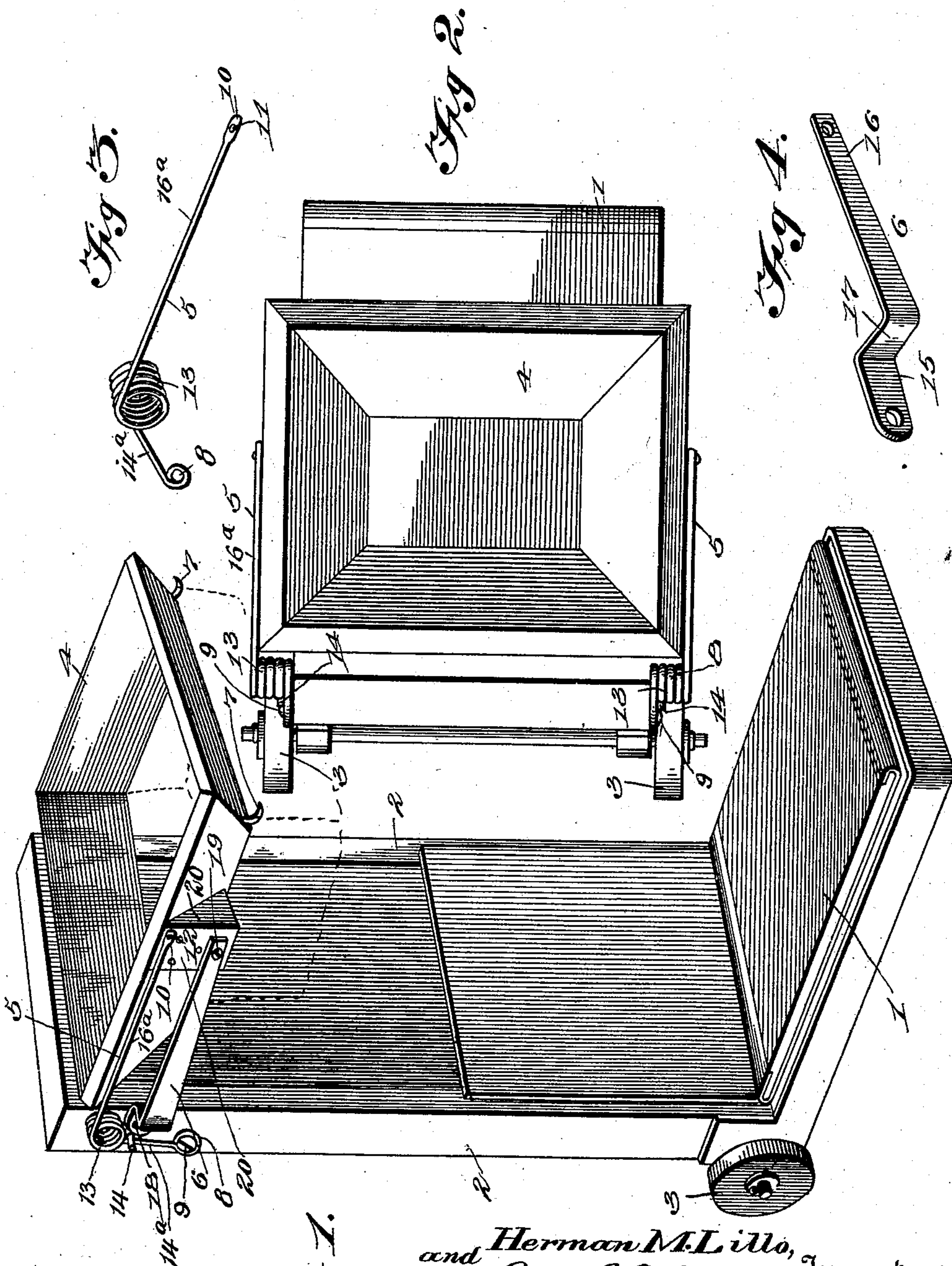
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H. M. LILLO & O. A. GIERE.
SACK HOLDER.

(Application filed May 16, 1901.)

(No Model.)



Witnesses:
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Fig. 1.

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SACK-HOLDER.

SPECIFICATION forming part of Letters Patent No. 695,644, dated March 18, 1902.

Application filed May 16, 1901. Serial No. 60,541. (No model.)

To all whom it may concern:

Be it known that we, HERMAN MAGNUS LILLO and OLE AMUND GIERE, citizens of the United States, residing at Rockdell, in the county of Olmstead and State of Minnesota, have invented a new and useful Sack-Holder, of which the following is a specification.

This invention relates to bag or sack holders of the character employed for holding a sack upright upon a platform of a pair of scales.

The object of the invention is to present a simply-constructed, thoroughly efficient, and durable form of bag-holder, its construction being such that it may be attached to the upright beams of an ordinary platform-scale without necessitating any change in the structural arrangement of any part of the scale; furthermore, to provide a sack-holder which shall be operative for holding or suspending the sack in vertical position without danger of tearing or otherwise injuring the sack.

As a matter of further and specific improvement the hopper-supporting means is caused to constitute at once a support and a returning means for bringing the hopper to its normal position after the bag has been detached therefrom, the returning means to present such resistance to depression from the weight of the bag as to cause the bag to retain a vertical position while being filled.

Further and more specific details of construction will be hereinafter fully pointed out and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated a form of embodiment of invention capable of carrying the invention into effect, it being understood that the arrangement therein shown may be altered or wholly changed in the matter of minor details of construction without departing from the spirit of the invention, and in these drawings—

Figure 1 is a view in perspective, exhibiting the platform and standards of a scale, with the bag-holder attached to the stand-

ards. Fig. 2 is a view in plan. Fig. 3 is a perspective detail view of one of the spring supporting-arms of the bag-holder. Fig. 4 is a similar view of one of the rigid guide-arms.

Referring to the drawings, 1 designates the base of an ordinary platform-scale, and 2 the standards, suitable wheels 3 being associated with the platform to permit the structure being moved as desired. As the scale mechanism has nothing whatever to do with the present invention, the same is omitted. The form of base and uprights herein shown is one that will be effective in use; but it is to be understood that the invention is not to be limited to coöperation with a scale alone, as it may be used under other conditions where a scale would not be employed.

The bag-holder comprises a hopper 4 and two sets of supporting-arms 5 and 6, respectively arranged on opposite sides of the hopper, the arms 5 being yielding or resilient and the arms 6 being rigid to form guide-arms. The hopper 4 is made of any suitable material, preferably of wood, and carries at each corner near the lower side a pointed hook or projection 7 to engage the material of the bag, as indicated by dotted lines in Fig. 1, thereby to hold the bag in operative position underneath the mouth of the hopper. Each of the spring-arms 5 consists of a piece of spring-wire having one end formed into a loop or ring 8 to be engaged by a screw 9 to hold it in position upon the standard 2, the other end of the spring being flattened or enlarged, as at 10, and provided with an opening 11 to be engaged by a pin or screw 12 to secure this end of the arm to the hopper, the connection being a pivotal one to permit the hopper to rise and fall in operation. Intermediate of the ends of the spring the metal is turned upon itself a number of times to form coils 13, this being for the purpose of giving the necessary spring to the arm, as will be understood. Adjacent to each screw 9 is a stud or projection 14, secured in the standard and upon which the shorter members 14^a of the spring supporting-arms bear to hold the same in horizontal position.

The form of spring-arm herein shown is

exceedingly simple of construction and cheap of manufacture and will be found to fill all of the requirements necessary for the purpose designed; but it is to be understood that the invention is not to be limited to this precise form of spring-arm, as other forms of arms may be employed and still be within the scope of the invention, the point being to present an effective form of spring-arm that will operate to hold the hopper always elevated.

Each guide-arm 6 is constructed of a piece of metal formed with a short member 15, a long member 16, and an offset or bend 17, the function of the bend being to bring the long member 16 into alinement with the long member 16^a of the spring-arm, the short member 15 being pivotally connected with the upright by a screw 18 and the long member 16 with the hopper by a screw 19. In order that the long members of each set of supporting-arms shall be in vertical alinement in use, so that their axes of rotation shall be practically coincident, the hopper has secured to it at each end a lug or boss 20, the same in elevation being a right angle, so that when positioned on the end of the hopper their outer faces will be vertical. The lugs 20 may be secured to the hopper in any suitable manner, as by bolts or screws, and may be of any suitable material, preferably of metal. By reason of the fact that the pivotal points between the two sets of supporting-arms and the hopper are in vertical alinement the hopper will always maintain a horizontal position throughout its entire arc of movement, and by this simple expedient any tendency of the hopper to tilt will be obviated. It will here be noted that the essential function of the rigid arms 6 is to form a guide for maintaining the hopper level throughout the movement thereof, while the other arms form an elastic swinging connection between the hopper and its support.

The device for supporting the hopper, as herein described, will be exceedingly simple of construction and durable in use and may be constructed and applied to an ordinary scale at but a slight expense, and by reason of the fewness of the parts of the device as a whole danger of derangement in use will be entirely overcome. It will be apparent from the manner in which the parts of the device are made that should damage occur in use repair may readily be effected by a machinist of ordinary ability, thereby enhancing the value of the device and recommending it to persons remote from manufacturing centers.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape,

proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What we claim is—

1. A sack-holder comprising a suitable standard, a hopper, a pair of horizontally-disposed guide-arms pivoted to the standard and to the hopper, and a pair of resilient supporting-arms connecting the hopper and the standard.

2. A sack-holder comprising a support, a hopper, and opposite sets of horizontally-disposed arms, the members of each set being vertically alined and having their corresponding ends pivotally connected in vertical alinement to the support and hopper, respectively.

3. A sack-holder comprising a hopper and two sets of horizontally-disposed supporting-arms pivotally connected to a suitable standard and with the hopper, one of the arms of each set being rigid and the other being resilient.

4. A sack-holder comprising a suitable standard, a hopper provided with means to engage a sack, and two sets of supporting-arms pivotally connected with the standard and with the hopper, the members of each set being disposed one above the other, one arm of each set being rigid and the other arm being resilient.

5. A sack-holder comprising a suitable standard, a hopper having downwardly-converged walls and provided with means to engage a sack, lugs or bosses carried externally by the ends of the hopper and having their outer faces disposed in a vertical line, and supporting-arms pivotally connected to the hopper and to the standard, the pivotal points of attachment of the arms with the hopper being in vertical alinement upon the outer vertical faces of the bosses, thereby always to cause the hopper to occupy a horizontal plane when depressed.

6. A sack-holder comprising a suitable standard, a hopper, and sets of supporting-arms pivotally connected with the standard and with the hopper, the members of each set being disposed one above the other, one of the supporting-arms of each set being constructed of a piece of wire having coils intermediate of its ends, and the other arm being rigid and having an offset near its point of attachment with the standard, thereby to cause the outer supporting members of the two arms to occupy the same vertical plane.

7. A sack-holder comprising a standard, a hopper having sack-engaging means, opposite sets of swinging arms pivotally connecting the hopper to the standard, the members of each set being located in vertical alinement and also having their outer ends pivotally connected to the hopper in vertical alinement, the lower arm being rigid, and the

upper arm comprising angularly-related parts having an intermediate spring-coil connecting the same, and opposite stop projections carried by the standard and lying in the
5 path of the downward movement of that part of the spring-arm that is connected to the standard.

In testimony that we claim the foregoing as

our own we have hereto affixed our signatures in the presence of two witnesses.

HERMAN MAGNUS LILLO.
OLE AMUND GIERE.

Witnesses:

C. N. MAGNISON,
CORA P. OLESON.