J. M. FISH.

Machine for Weighing and Bagging Grain.

No. 28,568. Patented June 5, 1860.

Fig. 2

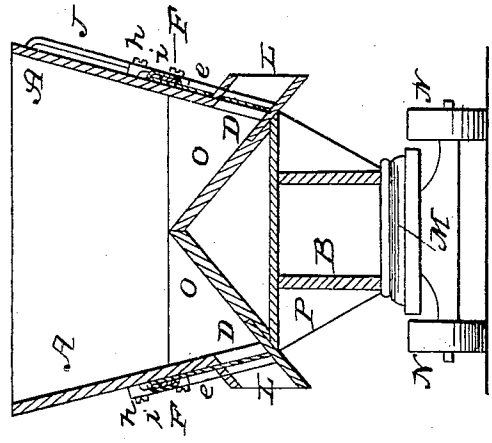
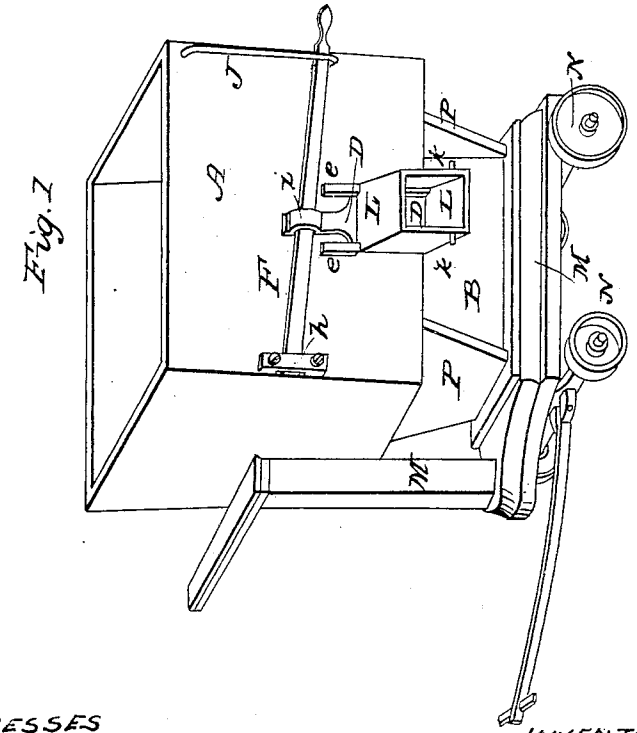


Fig. 1



WITNESSES

A. W. Whaley

H. C. Forbush

INVENTOR

James M. Fish

By E. B. Forbush

Attorney

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JAMES M. FISH, OF BUFFALO, NEW YORK.

IMPROVEMENT IN MACHINES FOR WEIGHING AND BAGGING GRAIN.

Specification forming part of Letters Patent No. **28,568**, dated June 5, 1860.

To all whom it may concern:

Be it known that I, JAMES M. FISH, of the city of Buffalo, county of Erie, and State of New York, have invented a certain new and useful Improvement in Apparatus for Weighing and Bagging Grain, Ground Feed, Beans, Seeds, and other Produce; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

The nature of my invention relates to the construction of a portable grain-bin, (either of metal or wood,) having an appropriate spout or valve upon either side to facilitate the process of discharging the grain or other produce into bags after it is weighed, and the combination of such grain-bin with a portable platform weighing-scale in manner hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe the construction and operation of the same.

Figure I is a perspective view of my improvement. Fig. II is a transverse section of the same.

Letters of like name and kind refer to like parts in each of the figures.

The grain-bin, although an entirety, may be described as of two parts, A and B, the part B being made to conform to the size of the platform of the scale upon which it stands. The part A is made much longer and wider than the part B, so that it will overhang the part B, as represented in the drawings. It also gradually widens as it rises, so as to increase its capacity for holding grain. It has a spout upon either side for conducting the grain into the bag, as represented at L.

D represents a gate or valve, which is raised or opened to allow the grain, ground feed, beans, or seeds to pass from the bin into the bag after the same has been weighed and is closed when the bag is filled. It slides in grooves between the guides *e e*. It is worked by means of the hand-lever F. The lever F is hinged to the side of the bin, as shown at *h*, and passes through a slot in the top of the gate D, as shown at *i*.

J represents a guide-bar connected to the side of the bin for guiding the movable end of the lever in its movement when opening and closing the gate.

k k are pins or hooks projecting from the spout L for the purpose of connecting the bag to the spout.

M represents an ordinary platform-scale supported upon the wheels N.

The bottom of the bin is elevated in the center, with descending surfaces converging to the spouts, as shown at *o o*, Fig. II, so that all of the grain in the bin will, by its own gravity, pass off through the spouts L.

P P represent end pieces of the part B, widened out so as to form braces or a wider support for the part A.

In actual practice this apparatus is a great labor-saving improvement. In handling and weighing large quantities of grain for shipment or transportation, it is a desideratum to be able to weigh the grain in bulk, and quickly and easily put it in bags after it is weighed, and thereby avoid the necessity of weighing and reweighing the bags. My improvement accomplishes these purposes. It can be easily moved from place to place to receive the grain from the bins as it is deposited in the mill elevator or store-house. The bin A being filled with grain, seeds, or other produce, and standing upon the scale, it is quickly weighed. A bag is then hooked onto each spout, the gates raised, and the bags allowed to fill. Then the gates are closed. The bags, when filled, are set aside and other bags hooked onto the spouts and filled as before, and so on until the grain is all drawn out of the bin. The bottom of the bin being made higher in the middle, converging downward to the spouts, the grain or other produce will run out of its own gravity and be divided in its passage, so that an equal quantity will run out at each spout and the bin will remain equally balanced upon the scale until the grain is all drawn out. The valves or gates are easily worked by hand by means of the levers, so that the passage of the grain may be quickly stopped when the bag is full and as quickly opened when an empty bag is hooked onto the spout to be filled. Its portability enables it to be used in all parts of a large store-house, mill, or elevator most

accessible to the grain in store. I have used it for more than a year, and have found it to be very convenient and useful.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement of the bin A, doubly-inclined floor O, vertical gates D, spouts L, frame B, and scale M, the whole being constructed and combined substantially in the manner and for the purposes explained.

JAMES M. FISH.

Witnesses:

L. THIELL FISH,

H. B. BURT.