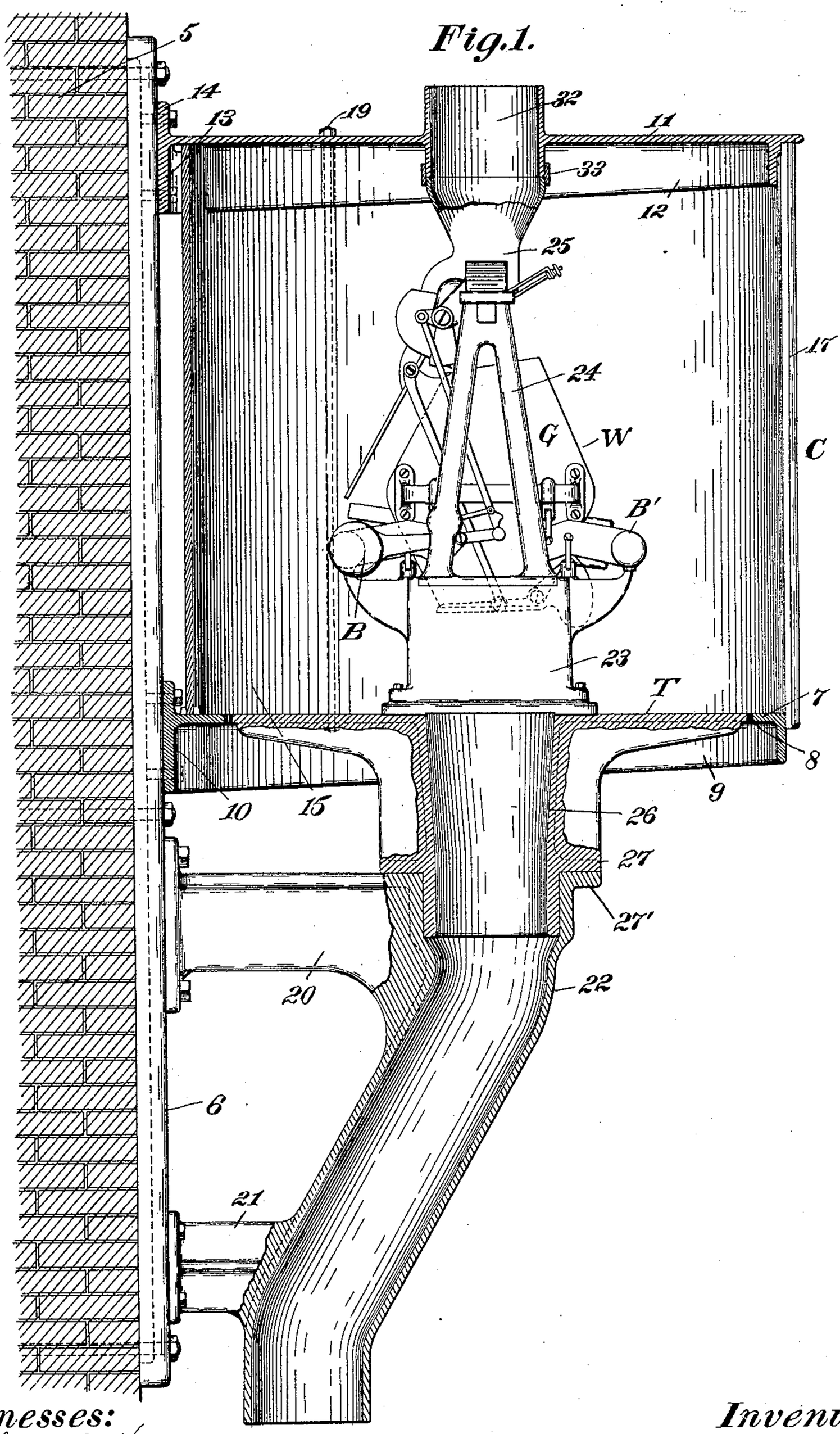
(No Model.) 3 Sheets—Sheet 1.

F. H. RICHARDS.

WEIGHING MACHINE HOUSING.

No. 565,227. Patented Aug. 4, 1896.

Fig. 1.



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(No Model.) 3 Sheets—Sheet 2.

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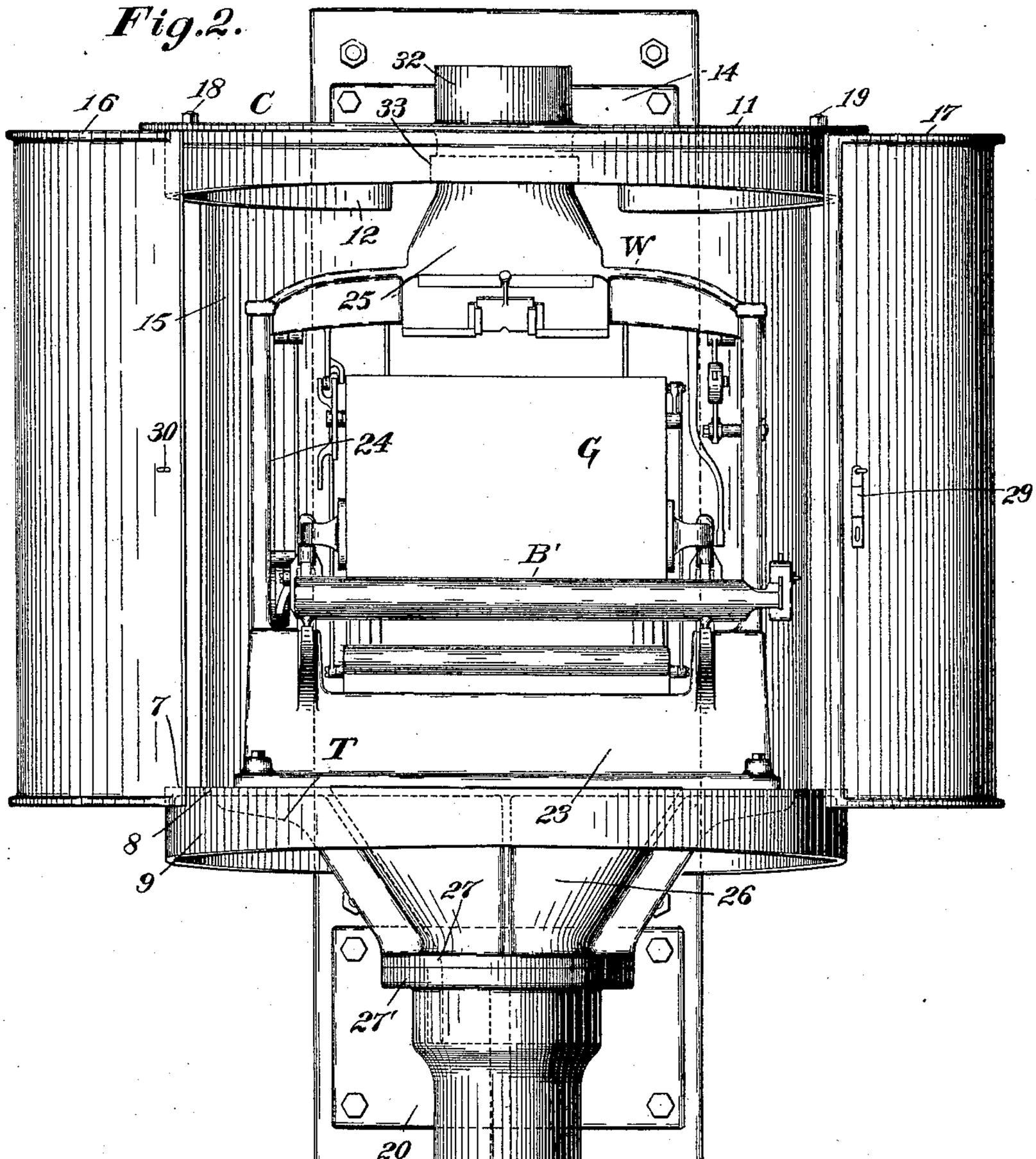
Fig. 2.



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(No Model.) 3 Sheets—Sheet 3.

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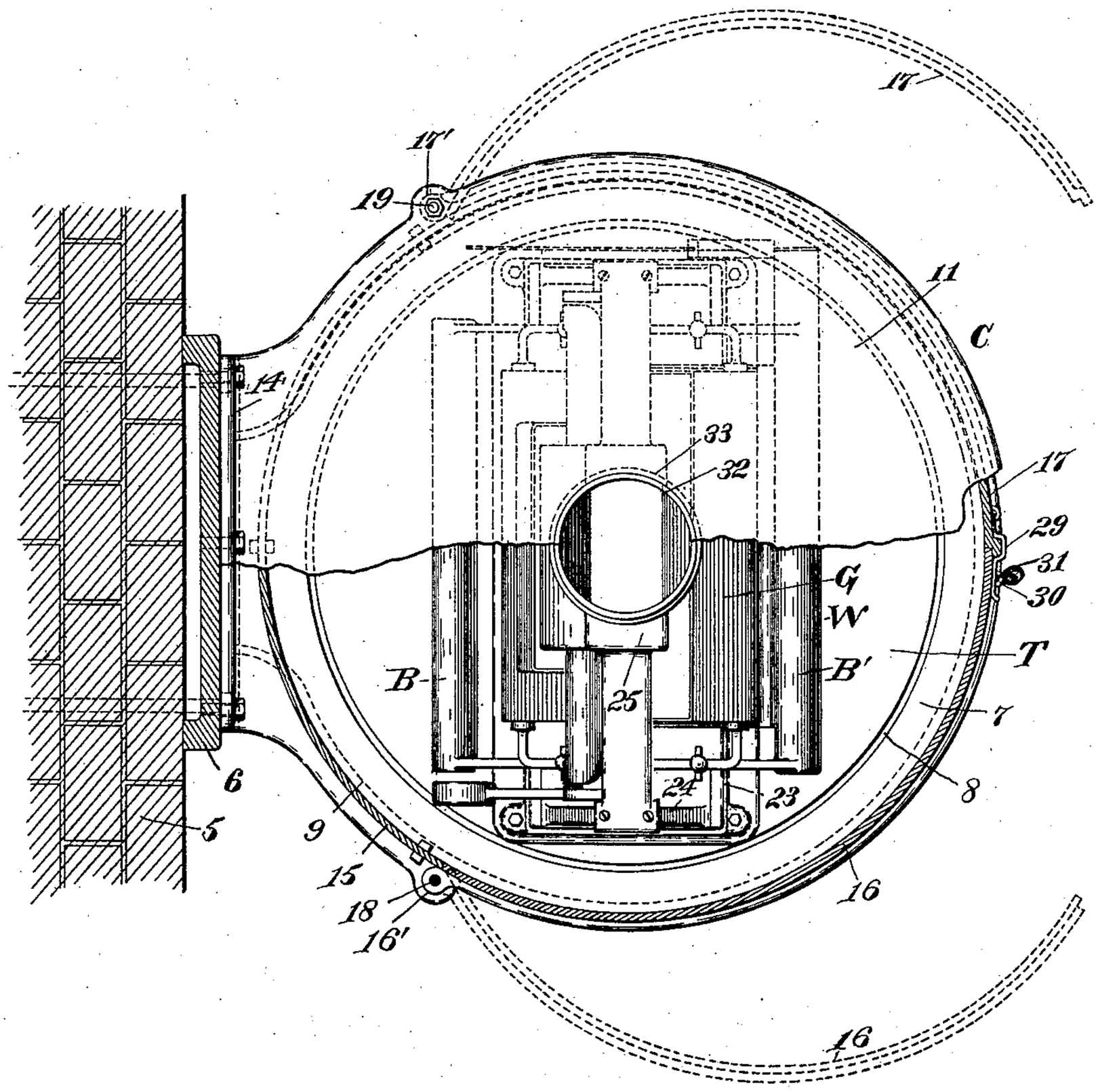
Fig. 3.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

FRANCIS H. RICHARDS, OF HARTFORD, CONNECTICUT.

WEIGHING-MACHINE HOUSING.

SPECIFICATION forming part of Letters Patent No. 565,227, dated August 4, 1896.

Application filed March 18, 1896. Serial No. 583,738. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS H. RICHARDS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Weighing-Machine Housings, of which the following is a specification.

This invention relates to combined housings and supports for weighing-machines, the object being to provide a device of this character, embodying means for thwarting malicious attempts to tamper with the operative parts of an incased weighing-machine, whereby a register connected with such machine might be wrongfully operated to falsify the record of work performed by the machine, and also embodying means for insuring ready access, by authorized persons, to all parts of the machine for the purpose of reading the register, making repairs, &c.

In the drawings accompanying and forming part of this specification, Figure 1 is a central vertical section of a housing and support embodying my invention. Fig. 2 is a front elevation of the same, and Fig. 3 is a plan view with parts broken away.

Similar characters designate like parts in all the figures of the drawings.

In connection with my present improvements, and for convenience in illustrating the nature and purpose thereof, a weighing-machine, substantially similar to that disclosed in Letters Patent No. 548,840, granted to me October 29, 1895, is shown, to which reference may be had, and the principal parts of which will be hereinafter briefly described. It is obvious, however, that any other type of machine may be substituted for that illustrated.

A wall or other structure is shown at 5, having secured thereto, by bolts or other fastening means, the relatively long face or supporting-plate 6, to which are suitably affixed the various component parts of the device.

The housing or casing for inclosing the weighing-machine is designated in a general way by C. It is herein shown of cylindrical form, although it may be of any other suitable shape, and it will be hereinafter more minutely described.

A preferably circular or annular base-plate is shown at 7, the opening 8 formed therein being of relatively great diameter, and within which a turn-table for supporting the machine located within the casing C is operative. The base-plate 7 is also shown having the downwardly-projecting flange or rim 9, through which and the oppositely-disposed flange 10 bolts or other fastening means may be passed and secured in the supporting-plate 6.

The top plate of the casing is designated by 11, and is shown having the flange or rim 12, the purpose of which will hereinafter appear, and as also having the oppositely-disposed flanges 13 and 14, by which said top plate may be suitably secured to the supporting plate 6. The housing or casing C also comprises a segmental plate or wall 15, suitably secured to and between the top and bottom plates thereof, and provided with the hinged or pivoted doors 16 and 17, by which access may be had to the interior of the casing and to the machine located therein.

Two tie rods or bars are shown at 18 and 19 passing through perforated lugs or ears formed on the top and bottom plates 11 and 7, respectively, and passing through hinge openings or brackets 16′ and 17′, (see full and dotted lines, Fig. 3,) formed on or secured to the two doors 16 and 17, said rods serving as pivotal supports for the two doors, and also as a means for connecting and firmly holding the two plates against displacement.

Two brackets or supports are shown at 20 and 21, respectively, connected by the discharge conduit or pipe 22, these parts being herein illustrated as integral, said pipe constituting a means for rotatively supporting the turn-table, which is designated in a general way by T, and which will now be described.

A weighing-machine is designated in a general way by W, and is shown supported by the turn-table T, within the casing C; and said machine will preferably be held against movement relatively to said turn-table, when in working position, by some suitable holding means, as bolts passing through the base thereof.

The weighing-machine comprises a chambered base 23 for supporting the framework 24, which in turn carries the supply chute or hopper 25.

The beam mechanism for supporting the bucket and its connected mechanisms is shown consisting of the two scale-beams B and B′, the bucket being designated by G, and in practice its loads of material will be intermittently discharged into the chamber of the supporting-base 23, from which they gravitate downward and into the communicating delivery conduit or pipe 26, extending downward from the turn-table T and preferably constituting an integral part thereof, the bore or opening in said pipe registering with that of the discharge conduit or chute 22, beneath the outlet-opening of which latter suitable vessels may be placed for receiving the bucket-loads as they are intermittently discharged by the weighing-machine W.

The inlet-opening of the pipe or conduit 22 is shown flared, and the lower end of the delivery pipe or conduit 26 is shown rotative within said first-mentioned conduit, the connection being such that said delivery-pipe 26, and hence the turn-table T, may freely rotate, it being evident that the said delivery-pipe serves practically as a pivot on which the table T turns.

The communicating conduits 26 and 22 are illustrated having formed peripherally thereon the complementary flanges 27 and 27′, respectively, the latter serving as a support for the former, so that an even movement of the turn-table T, as it is rotated, is assured.

The doors 16 and 17, when closed, will shut tightly against the flanges 9 and 12, formed on the two plates of the casing C, and the door 17 is illustrated provided with a hasp 29, the usual opening in which takes over a staple 30 on the other door, as indicated by full lines in Fig. 3, and which may be locked thereon by a suitable lock, as 31.

For providing access to the incased machine W, the two doors may be swung open, as indicated in Fig. 2 and by the dotted lines in Fig. 3, so that the machine may be readily turned around with its supporting turn-table and all parts thereof brought to view.

The inlet-opening of the supply chute or hopper is shown circular in cross-section, the upper edge thereof fitting against the lower edge of the cylindrical supply-conduit 32, which projects through the top plate 11 and preferably forms an integral part thereof.

An annular slip or sliding jacket or sleeve is illustrated at 33 (see Fig. 1) embracing the hopper and chute, said jacket serving as a guard to prevent waste of the material at the point of connection of said parts and not interfering with the rotation of the turn-table T.

When it is desired to remove the machine for any purpose, its base-holding bolts are withdrawn and the sleeve slid upward along the cylindrical conduit, and when said sleeve is above the upper edge of the chute or hopper 25 it will be evident that the machine W may be easily removed.

While I have shown and described a weighing-machine as supported by the turn-table, it is obvious that my invention is not limited thereto, as any machine could be located within the inclosing casing and be secured in the same manner without departing from the spirit thereof.

Having described my invention, I claim—

1. A device of the class specified comprising a casing having top and base plates, each of which is provided with an opening; a turn-table operable in the opening of said base-plate and having a conduit; and a supporting-bracket also provided with a conduit for rotatively supporting said first-mentioned conduit.

2. A device of the class specified, embodying a casing comprising a base-plate having an opening; a turn-table operable within said opening; and a suitably-supported discharge-conduit for rotatively supporting said turn-table.

3. A device of the class specified, embodying a casing comprising a base-plate having an opening; a turn-table operative within said opening, and having a conduit; and a second conduit for rotatively supporting said first-mentioned conduit.

4. A device of the class specified, embodying a casing comprising connected top and base plates, said base-plate having an opening; and a door or doors; a turn-table rotative within said opening, and comprising a conduit; and a second conduit communicating with said first-mentioned conduit and rotatively supporting the same.

5. A device of the class specified, embodying a casing comprising top and bottom plates, the last mentioned of which has an opening; a wall; tie-rods connecting said plates, and constituting pivotal supports for a door or doors; and a turn-table supported by rotative movement within said opening.

6. A device of the class specified comprising a casing consisting of top and bottom plates, the first mentioned of which is intersected by a supply-conduit; a machine supported within said casing and having a supply-hopper communicating with said supply-conduit; and a sliding jacket embracing said chute and conduit.

7. A device of the class specified, comprising a casing; a turn-table; a machine supported thereby; a supply-hopper for said machine; a supply-conduit communicating therewith; and a sliding jacket embracing said hopper and conduit.

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