

No. 688,107.

Patented Dec. 3, 1901.

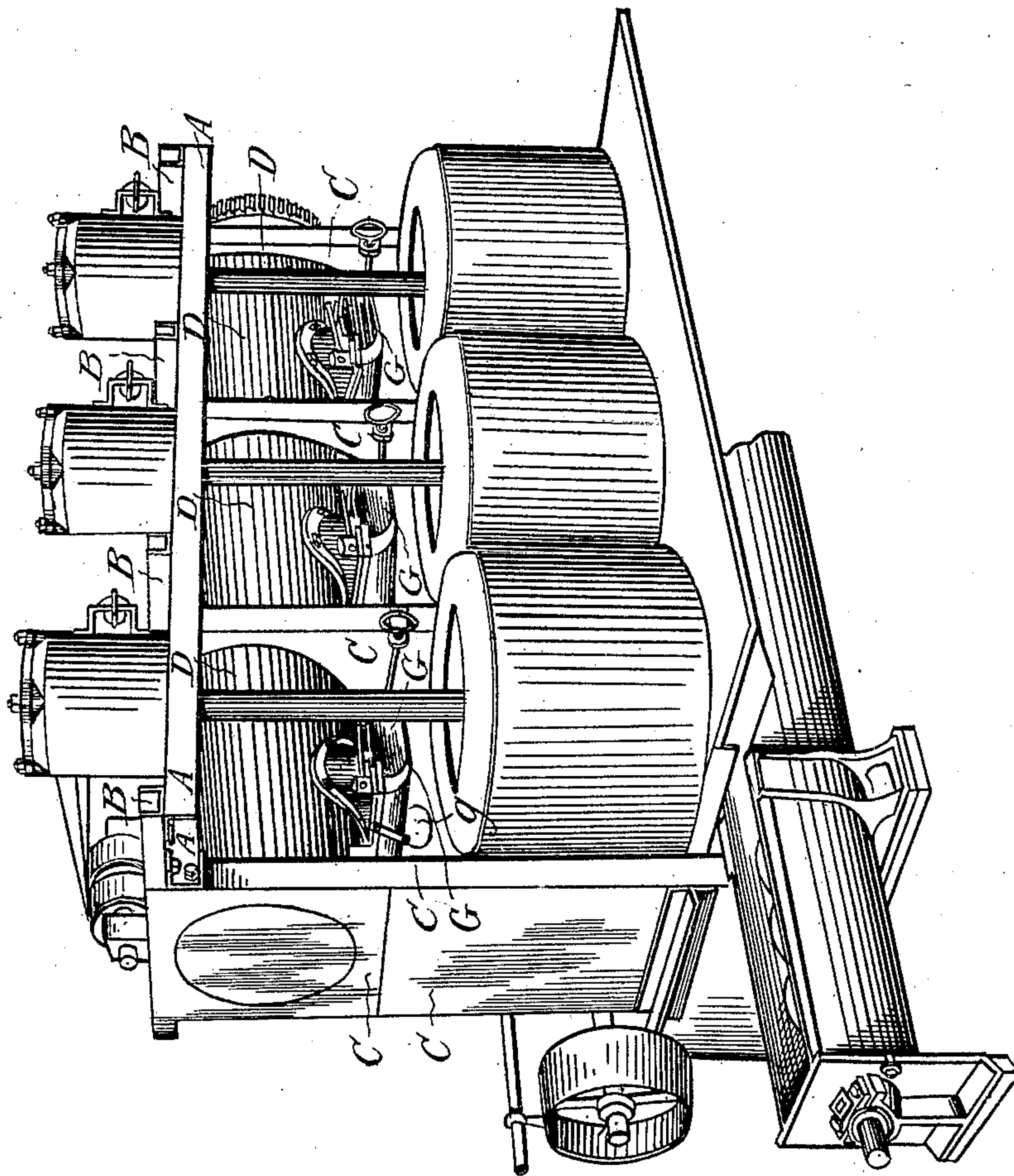
J. W. MACFARLANE.
CENTRIFUGAL MACHINE.

(Application filed Aug. 21, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1



Witnesses:

St. G. Manning

H. A. Knight

Inventor:
James Wright Macfarlane
By *Wright & Co.*
Attorneys.

No. 688,107.

Patented Dec. 3, 1901.

J. W. MACFARLANE.
CENTRIFUGAL MACHINE.

(Application filed Aug. 21, 1900.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 3.

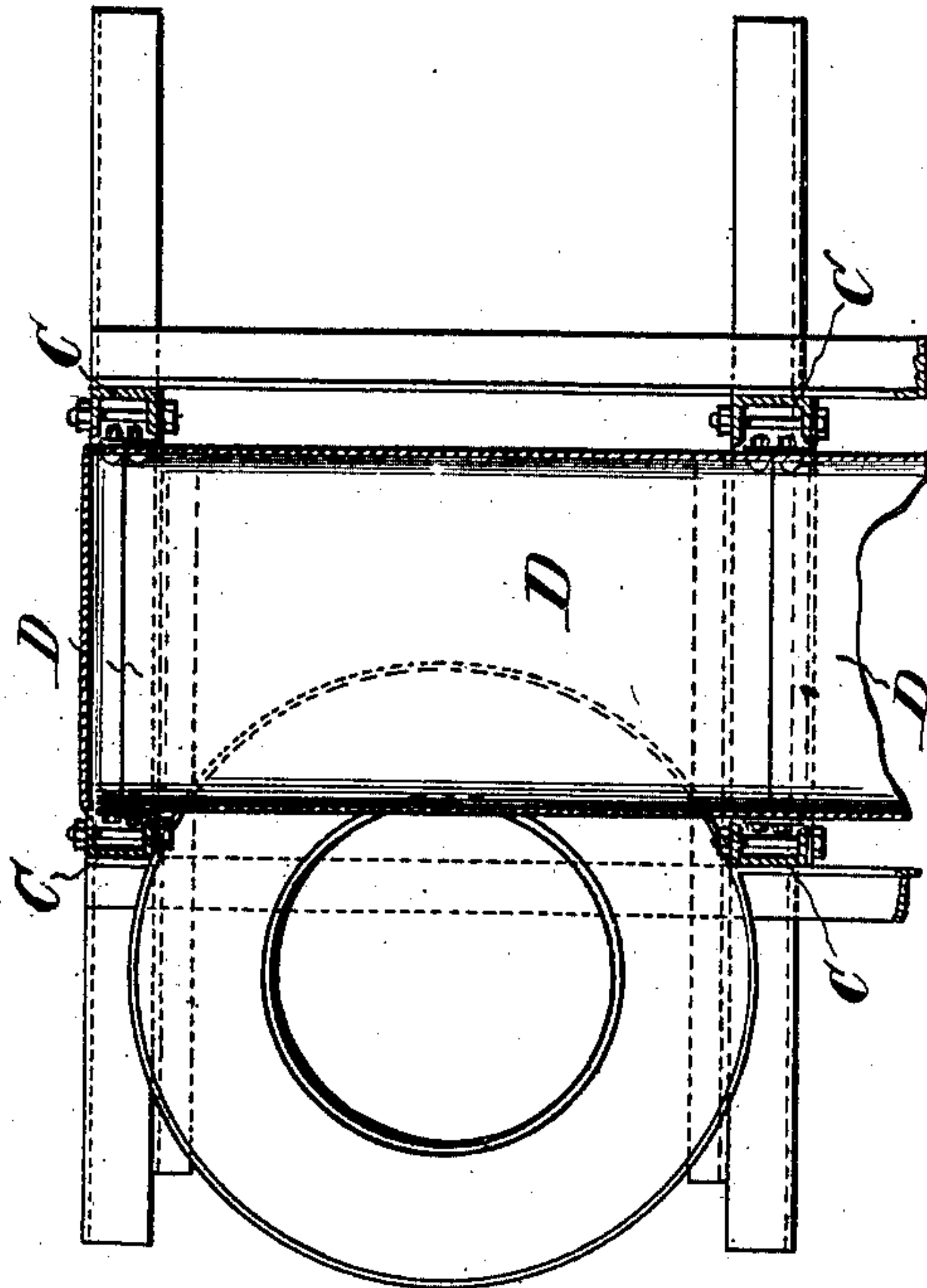
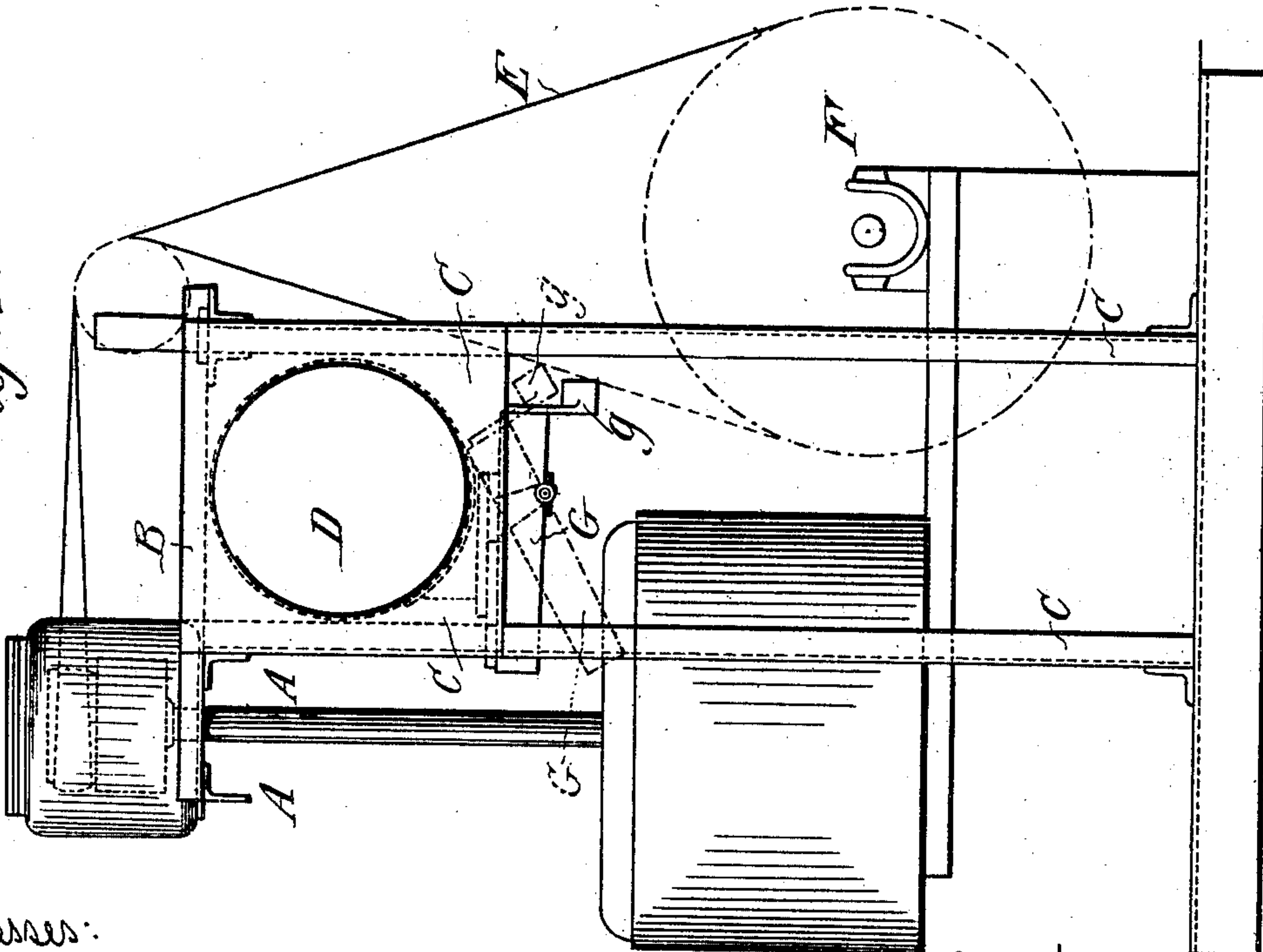


Fig. 2.



Sketches:
H. O. Manning
H. A. Knight

Inventor:
James Wright Macfarlane
By Knight Bros
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES WRIGHT MACFARLANE, OF GLASGOW, SCOTLAND.

CENTRIFUGAL MACHINE.

SPECIFICATION forming part of Letters Patent No. 688,107, dated December 3, 1901.

Application filed August 21, 1900. Serial No. 27,589. (No model.)

To all whom it may concern:

Be it known that I, JAMES WRIGHT MACFARLANE, engineer, of the firm of Watson, Laidlaw & Company, of 98 Dundas street, of the city of Glasgow, Scotland, have invented certain new and useful Improvements in Weston's Centrifugal Machines, of which the following is a specification.

This invention relates to improvements in that class of centrifugal machines used in the manufacture of sugar or similar substances which are suspended from above by elastic bearings to allow of the basket revolving around the proper axis corresponding to the distribution of materials in the baskets. Centrifugal machines of this class are well known and have been in use for many years and known as the "Weston centrifugal." In such machines the spindle carrying the basket is made up of two parts—an inner spindle, which does not revolve, carrying an outer revolving spindle attached to the basket.

The present invention relates more particularly to improvements in details of construction to allow of greater facilities for getting access to the upper parts of the spindle and for rendering the machine more convenient to operate.

It has been usual hitherto to carry the suspension-block of the suspended Weston centrifugal by fixing it to the under side of an overhead beam. It will be seen that by such a method the working parts of the spindle are not so accessible as they would be if there were no beam above the suspension-block. It is therefore proposed to so construct the framework of the machine generally that the upper portion of the suspension-block be fully exposed and readily accessible for the removal of the internal spindle and other parts requiring attention or renewal.

In the drawings, Figure 1 is a perspective view of the centrifugal machine. Fig. 2 is a vertical section taken between two of the baskets. Fig. 3 is a horizontal section through the mixer.

The framework consists of an overhead beam with supporting members. The overhead beam is composed of two longitudinal bars A A, which may be of angle-iron, connected together by cross-bars B B, which may be of channel-iron. The supporting members C C C may be constructed of wrought-iron or steel in rolled sections. The mixer D or vessel from which the material to be treated is

fed into the centrifugal, passes through the upright members C C C, and is fastened to them, as shown in Fig. 3. It thus forms part of the framework and gives a great amount of stiffness to the whole with a small weight of material.

The machine illustrated in the drawings is driven by a belt E from the driving-wheel F; but it may be driven by water-power. By this construction of the framework the spindle of the machine can be brought up through the overhead beam and the driving-pulley supported on the top of the beam instead of being hung from below, as hitherto.

The spouts G of the mixer are fitted with automatic chutes which drop down under the weight of masse-cuite when the mixer-valve is opened and serve as chutes to convey the masse-cuite or other substances to be treated into the basket of the centrifugal. When the valve is closed and the masse-cuite has run out of the chute, the chute returns to the first position and serves as a tray to catch any dripping which may escape past the valve.

I claim—

1. In a mounting for a centrifugal machine, a framework comprising the supporting members, cross-bars extending transverse and beyond said members, to which they are connected, longitudinal bars A secured under and extending the length of the frame, a base, and a centrifugal mounted upon said base and the mixer for feeding said centrifugal secured within said framework, whereby the driving-pulley of the centrifugal can be supported on top of the beam.

2. In a mounting for a centrifugal machine, a framework comprising the supporting members, cross-bars extending transverse and beyond said members, to which they are connected, longitudinal bars A secured under and extending the length of the frame, a base, and a centrifugal mounted upon said base, the mixer for feeding said centrifugal secured within said framework, whereby the driving-pulley of the centrifugal can be supported on top of the beam, and a tilting drip-tray secured to said mixer.

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

JAMES WRIGHT MACFARLANE.

Witnesses:

JOHN LIDDLE,

JOSEPH HENRY PEARSON.