

No. 620,165.

Patented Feb. 28, 1899.

S. McADOO.
PIPE TURNER.

(Application filed Mar. 7, 1898.)

(No Model.)

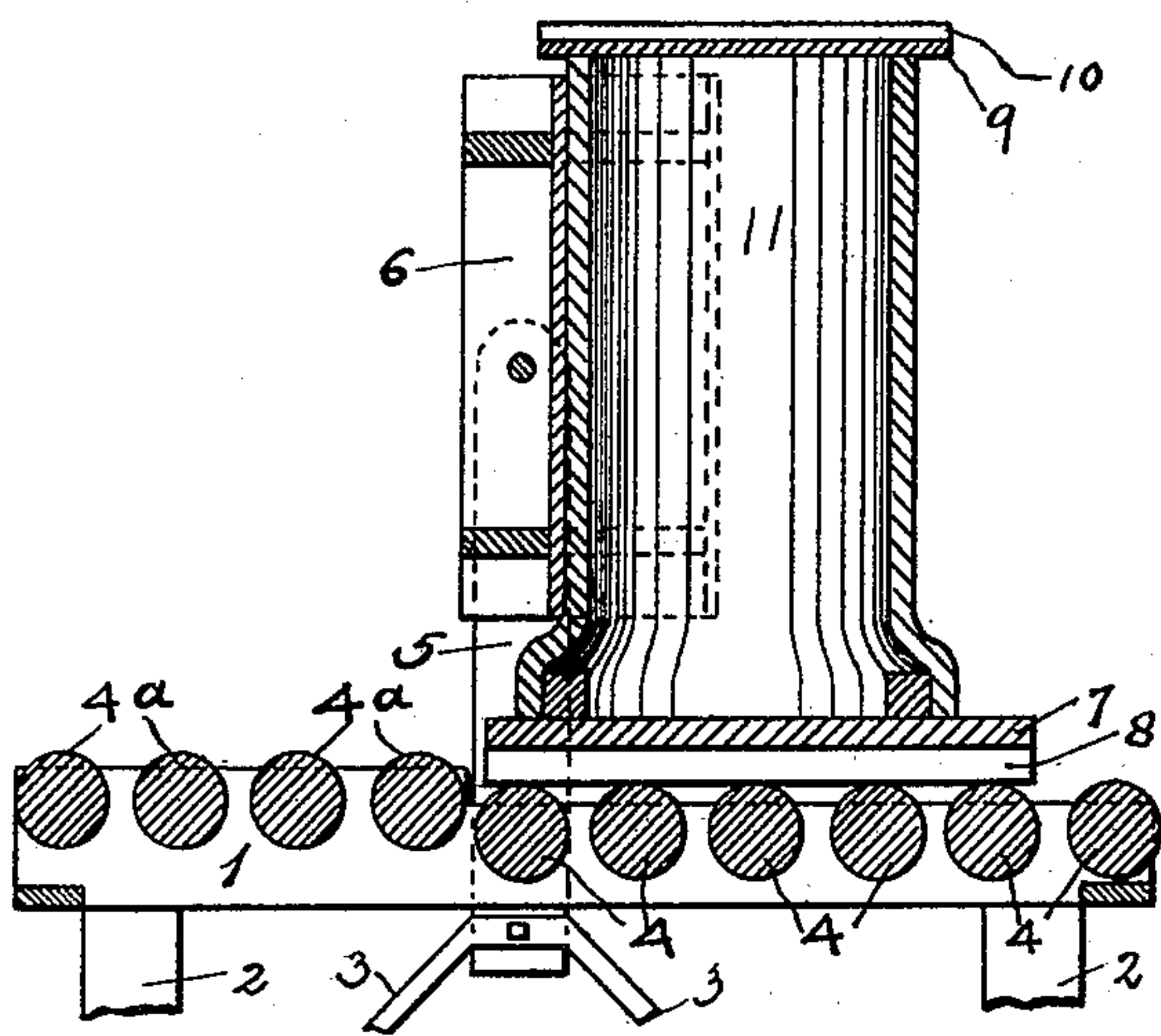


Fig. 1

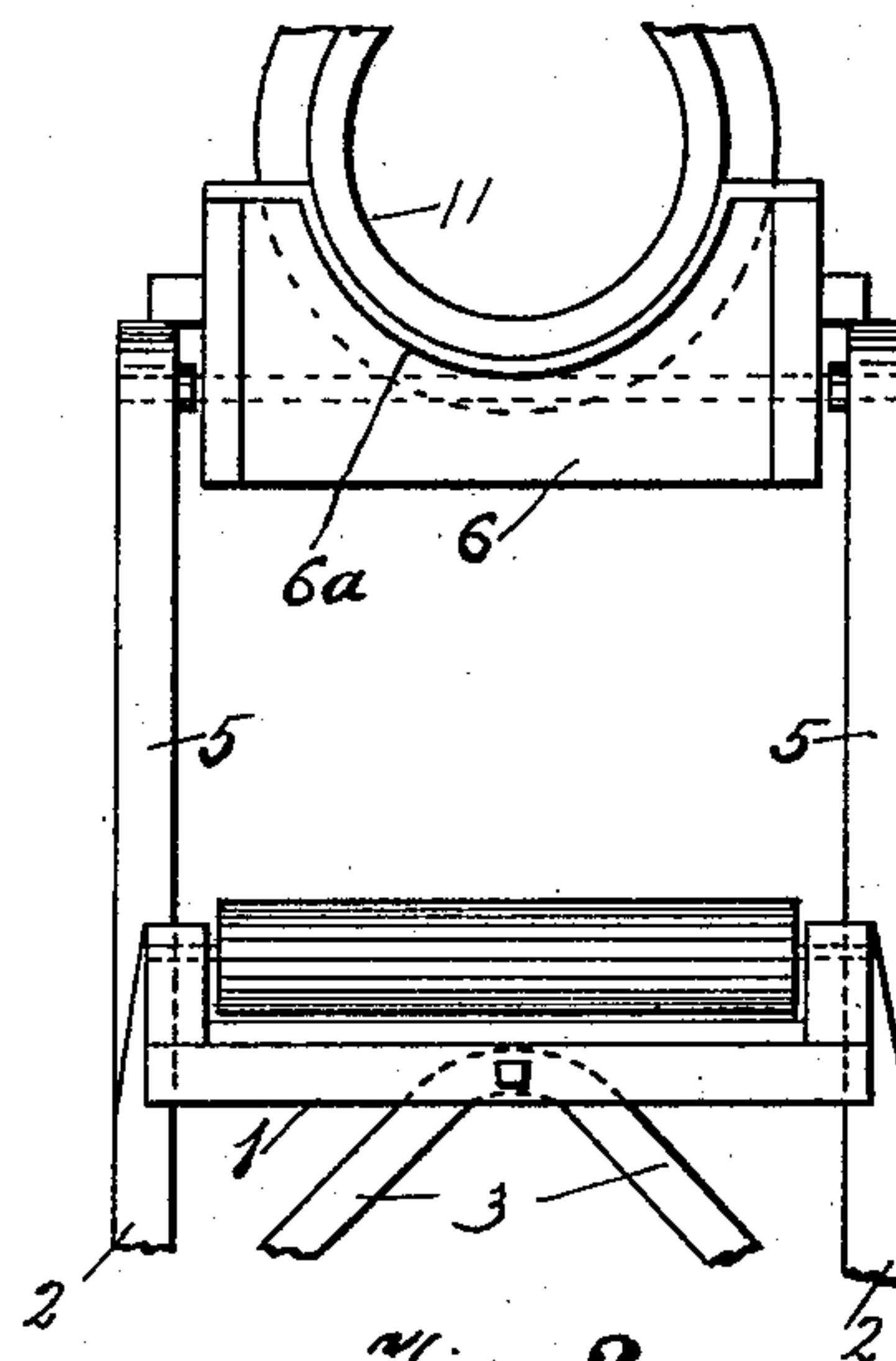


Fig. 2

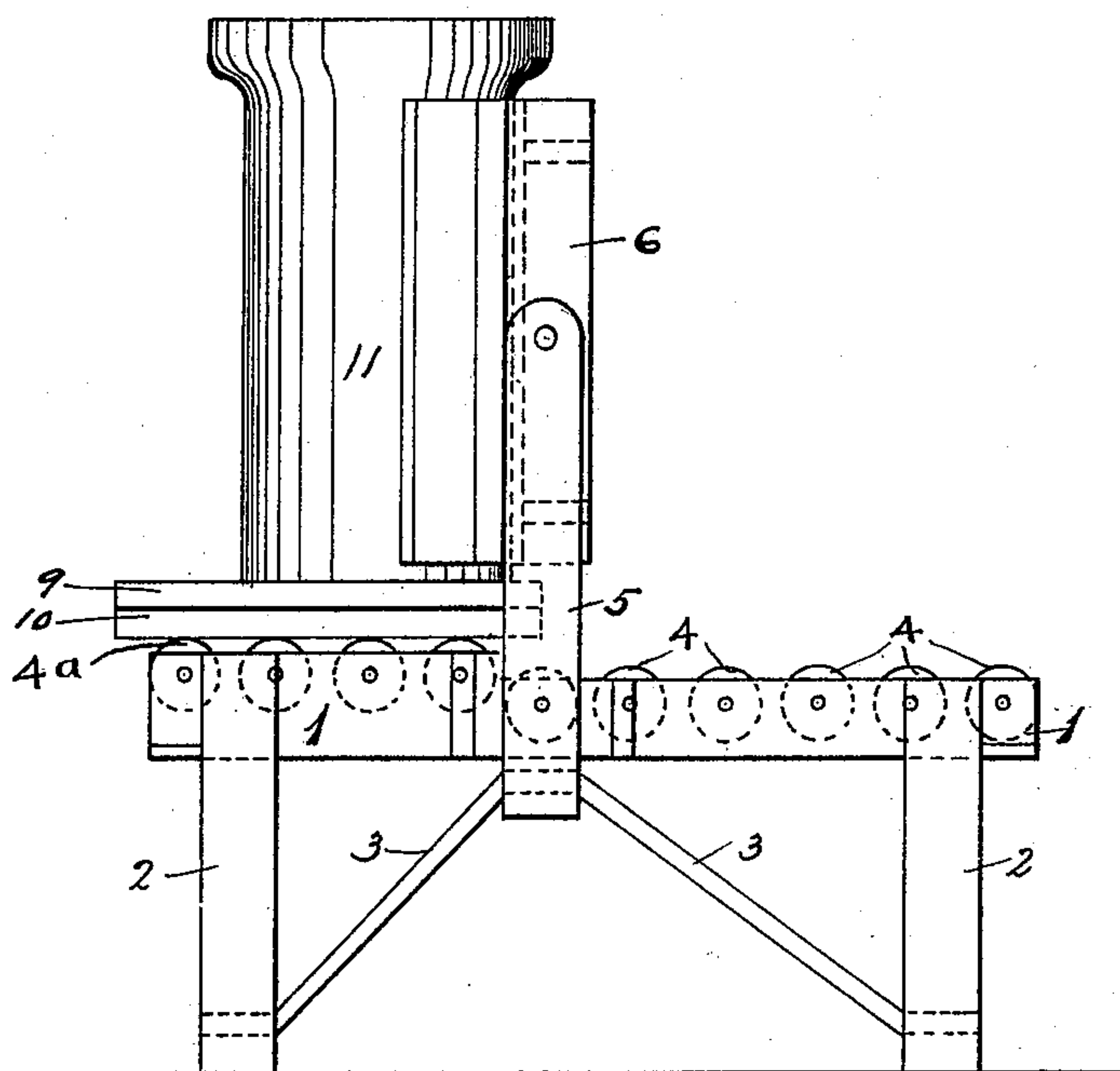


Fig. 3

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UNITED STATES PATENT OFFICE.

SAMUEL McADOO, OF TORONTO, OHIO.

PIPE-TURNER.

SPECIFICATION forming part of Letters Patent No. 620,165, dated February 28, 1899.

Application filed March 7, 1898. Serial No. 672,872. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL McADOO, a citizen of the United States of America, and a resident of Toronto, Jefferson county, State of Ohio, have invented certain new and useful Improvements in Pipe-Turners, of which the following is a specification.

Figure 1 is a longitudinal section of my device, showing the pipe in position ready to be turned. Fig. 2 is an end elevation of my improved pipe-turner, showing the pipe half-way turned—viz., to an angle of ninety (90) degrees—while Fig. 3 is a side elevation of my invention with the pipe turned and ready for removal for drying.

My invention, broadly stated, is an improved device for turning or reversing green clay pipes after they are taken from the press. The green pipes as they come from the press stand with the socket down, and if allowed to stand in this position tend to telescope and lose shape. It is accordingly necessary to reverse them, so that the spigot end is beneath, supporting the pipe, that they may dry, maintaining their shape. It has been usual to perform this operation by hand, requiring the services of several men and the expenditure of a great amount of time and labor. My device enables this operation to be accomplished with ease and despatch by two men.

My invention is especially applicable to light grades—say from twelve to eight inches in diameter—and is so arranged that the pipe is transferred from the press to the turner at a convenient height from the floor and at the same level, without stooping or lifting the pipe. This reduces the expense of manufacture and increases the output of the plant by at least one-half, inasmuch as handling such small sizes of pipe by a power-turner and two-wheeled pronged truck or by the old hand method would be very slow and expensive.

The following is a detailed description of my invention:

1 is a frame or table supported at a convenient height above the floor by legs 2 2 and braces 3 3.

4 4 and 4^a 4^a are two series of parallel rollers, 4^a 4^a being preferably slightly higher than 4 4—say by the length of the socket.

5 5 are two uprights fixed to frame 1, between which is pivotally supported cradle 6,

preferably made of wood. Said cradle has a concaved surface 6^a, conforming to the surface of the pipe to be turned, and the cradle being removable by withdrawal of pivot-pins 5^a 5^a. A cradle is in each case employed which fits the circumference of the pipe to be turned.

7 is the forming-board, on the under side of which are cleats 8 8, thus raising said board slightly from the surface on which it is resting and enabling it to be grasped readily with the hands. 9 is the palette-board, also fitted for the same reason with cleats 10 10.

11 is the pipe.

The operation of my device is as follows: The turner is placed adjacent to the press, and after the operation of pressing the green pipe on the press-table and transferring it to the forming-board is completed it is lowered to the level of the turner. The pipe now standing on the forming-board 7, socket end down, is pushed, together with said forming-board, onto rollers 4 4, so that it rests snugly against cradle 6, and in this position the pipe is cut off to the right length and the palette-board 9 placed thereon. The pipe is now in position to be turned. The workman seizes with one hand forming-board 7 and palette-board 9 with the other hand, and, holding them firmly in place, turns boards, pipe, and cradle on the pivots in uprights 5 5 through the position shown in Fig. 2 to that shown in Fig. 3, the pipe now standing spigot end down. By making rollers 4^a 4^a slightly higher than rollers 4 4 the pipe after being turned rests on said rollers 4^a 4^a without slipping down in relation to the cradle, as would otherwise be the case, inasmuch as the socket end of the pipe extends beyond the cradle and makes that extremity of the pipe extend by so much farther beyond that end of the cradle than the other said end of the pipe extends beyond the other end of the cradle. The forming-board 7 is now removed and the pipe on palette-board 9 rolled off the turner by means of rollers 4^a 4^a onto a truck to be taken away to dry. The merits of my invention, *inter alia*, are as follows: The pipe is kept at the same length as the truck, allowing the workman to remain in an upright position and work rapidly. In the case of a power-turner fitted to handle heavy grades of pipe it is

necessary to handle the pipe at the floor-level, necessitating, if the power-turner be used for smaller grades of the pipe after pressing, the lifting of the pipe to a higher level—viz., that
5 of the receiving - wagon—thus increasing greatly the cost of manufacture and making such use of the power-turner impracticable.

My turner is of light construction and may be readily lifted out of the way from the front
10 of the press when not in use.

Having described my invention, I claim—

1. In pipe-turners, the combination of a series of rollers mounted at substantially the level of the receiving-truck and a cradle
15 adapted to be turned through a half-circle and stationed intermediately of said rollers.

2. In pipe-turners, the combination of a framework, a series of rollers mounted therein to receive the pipe when it comes from the press; a pipe-turner mounted above said series of rollers; a second series of rollers to receive the pipe after it is turned, the level of both said series of rollers being substantially the level of the receiving-wagon which takes the pipe from the second series of
20 rollers. 25

Signed by me, at Pittsburg, this 24th day of February, 1898.

SAMUEL McADOO.

Witnesses:

WM. L. PIERCE,
M. W. CASKEY.