

No. 637,869.

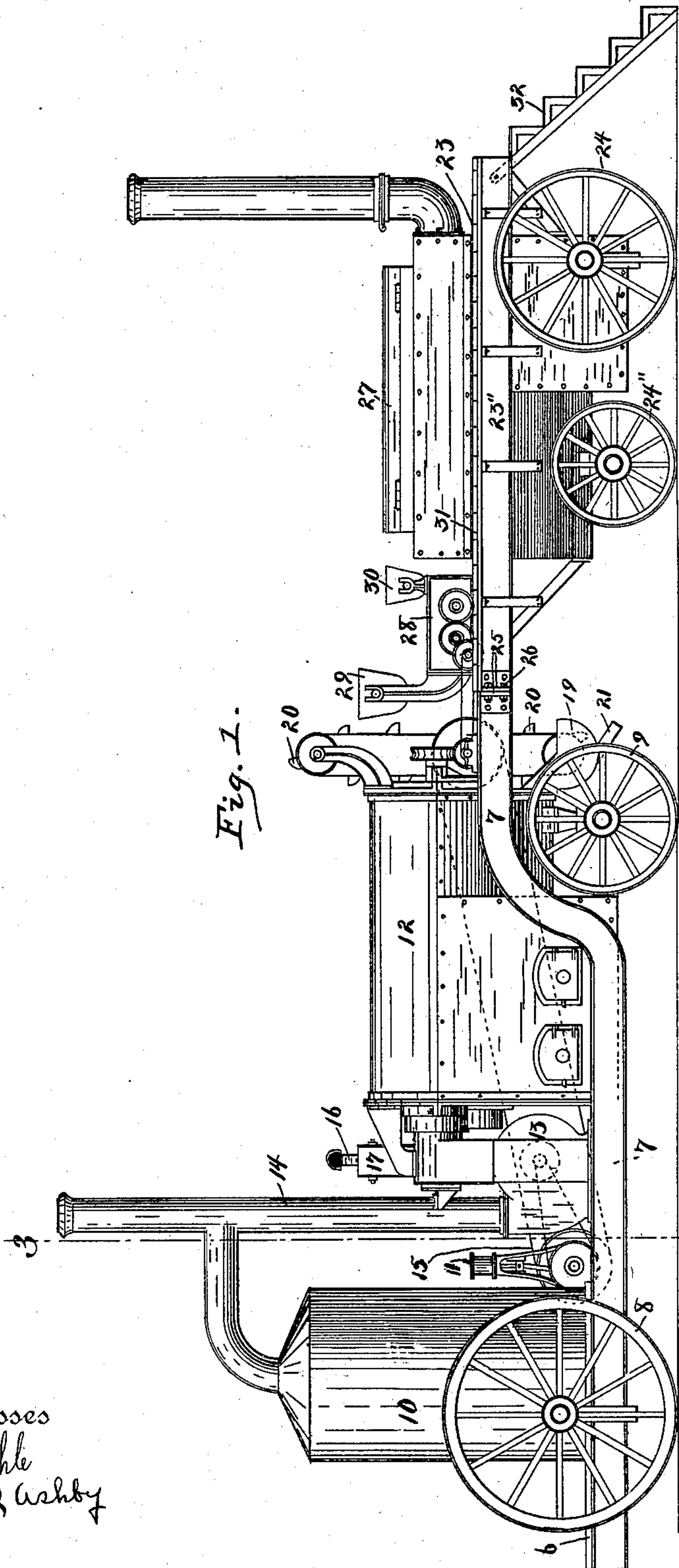
Patented Nov. 28, 1899.

F. A. HETHERINGTON.
PORTABLE PAVING REPAIR PLANT.

(Application filed May 19, 1897.)

(No Model.)

2 Sheets—Sheet 1.



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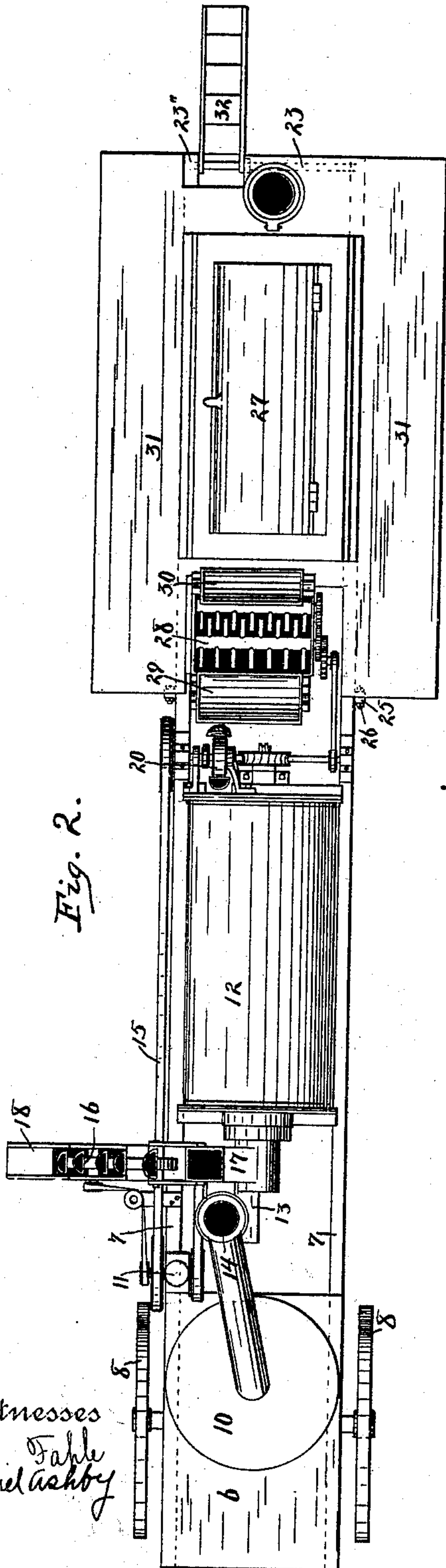


Fig. 2.

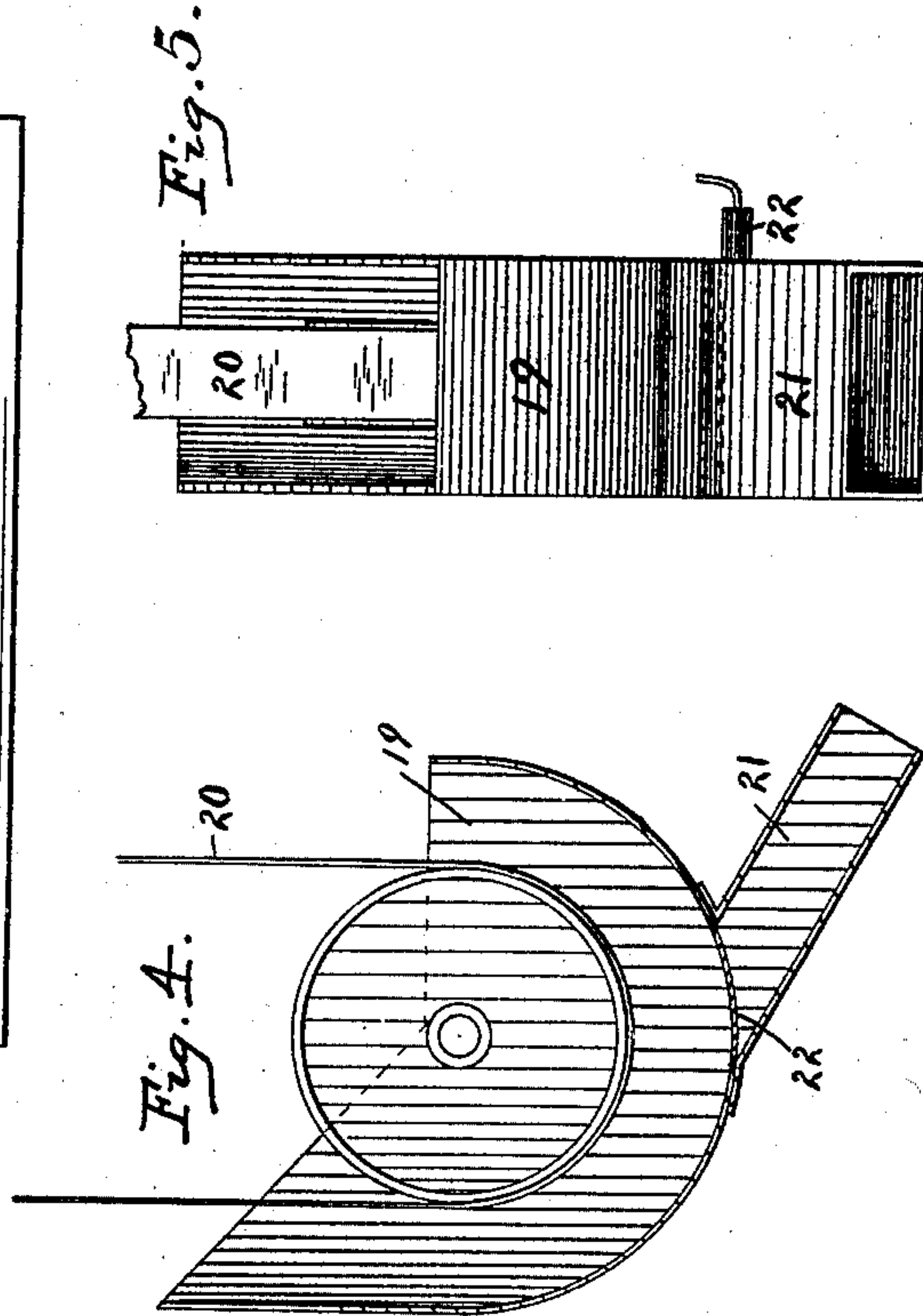


Fig. 4.

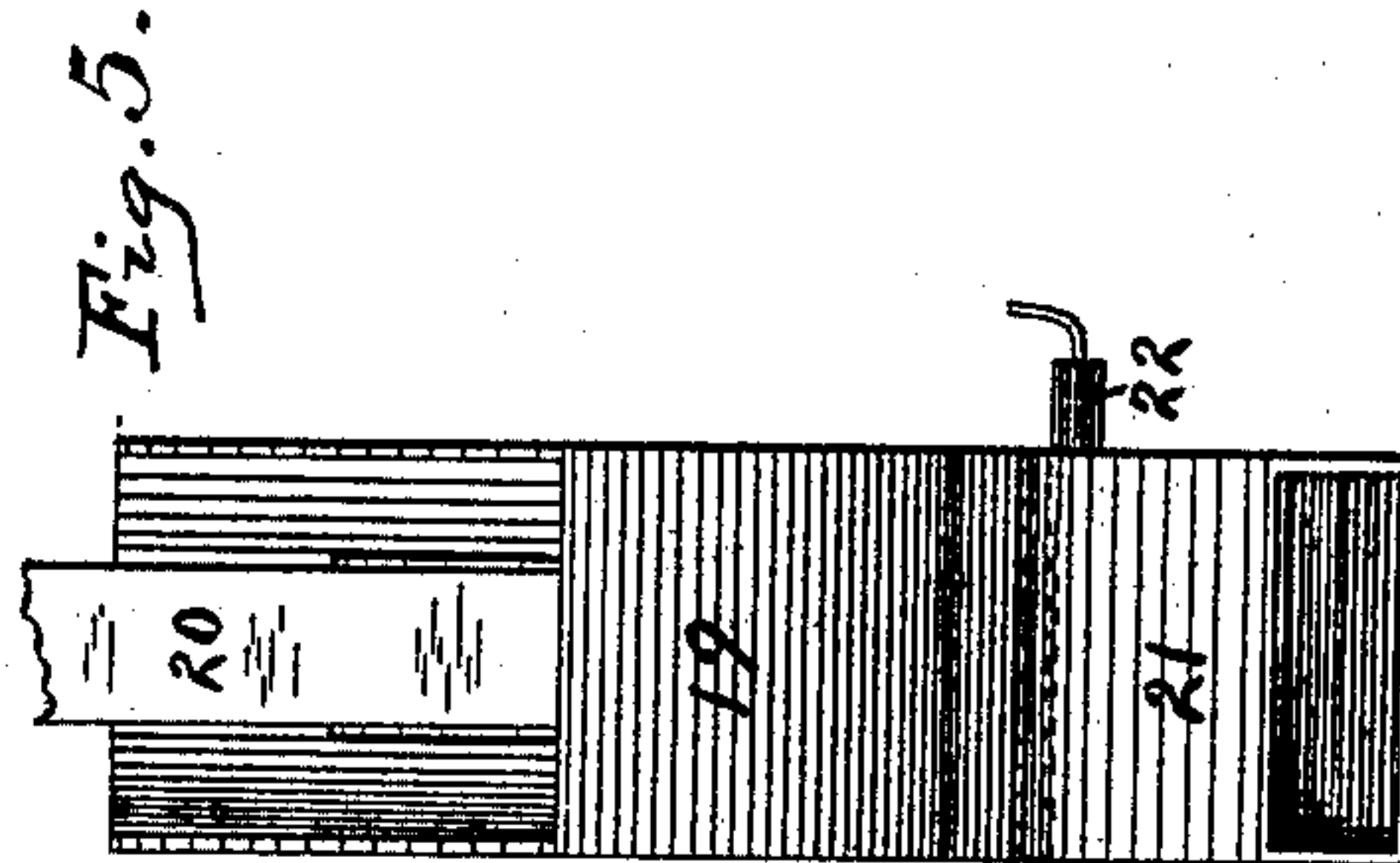


Fig. 5.

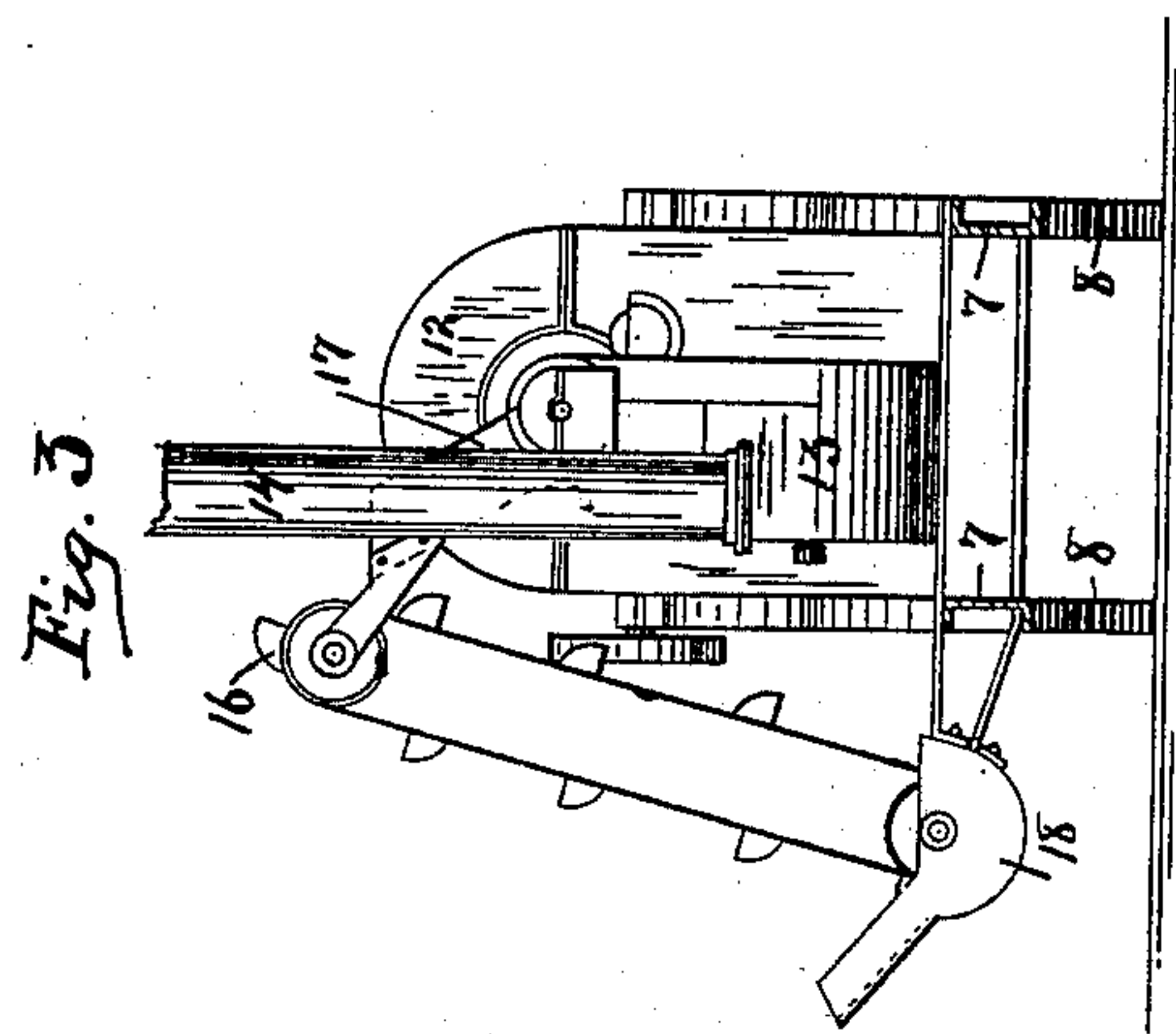


Fig. 3.

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UNITED STATES PATENT OFFICE.

FREDERICK A. HETHERINGTON, OF INDIANAPOLIS, INDIANA.

PORTABLE PAVING REPAIR PLANT.

SPECIFICATION forming part of Letters Patent No. 637,869, dated November 28, 1899.

Application filed May 19, 1897. Serial No. 637,176. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. HETHERINGTON, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Portable Paving Repair Plant, of which the following is a specification.

My invention relates to an improvement in repair plants for plastic pavements.

10 The object of my invention is to produce a repair-outfit, which may be easily transported over the streets, in which the surfacing material may be prepared as it is needed in patching or resurfacing paved streets.

15 A further object is to provide means whereby hot sand from the drier may be removed and used to soften the surface of the pavement, so that a portion thereof may be easily removed.

20 The accompanying drawings illustrate my invention.

Figure 1 is a side elevation of the outfit. Fig. 2 is a plan thereof. Fig. 3 is a section on line 3 3 of Fig. 1. Fig. 4 is a vertical sectional detail of the hot-sand boot. Fig. 5 is an end elevation thereof.

In the drawings, 6 indicates a portable platform or wagon-bed formed, if desired, by a pair of channel-irons 7 7, the said bed being 30 supported upon suitable pairs of wheels 8 and 9. Mounted upon the rear end of bed 6 is a boiler 10 and a small engine 11. At the forward end of bed 6 I mount a sand-drier 12 of any desired pattern, but preferably one of the form shown and claimed in Patent No. 582,353, issued to me May 11, 1897, the said drier being connected at its rear end with an exhaust-fan 13, which discharges into a chimney 14, the said chimney being also connected with the furnace of the boiler and the arrangement of drier and fan being such that the drier-furnace discharges into chimney 14 through fan 13. Drier 12 is provided with suitable driving-gearing and is connected by 45 a belt 15 with the engine 11. Mounted upon one side of bed 6 near the rear end of the drier is a sand-elevator 16, arranged so as to deliver into spout 17 of the drier and provided at its lower end with a boot 18, into 50 which the green sand may be shoveled or otherwise delivered. Mounted at the forward end of the drier is a hot-sand boot 19, which

is adapted to receive the hot dried sand from the drier, and in this boot is mounted the lower end of a hot-sand elevator 20, the upper 55 end of which is supported some distance above platform 6. Hot-sand boot 19 is provided with a delivery-spout 21, in which is mounted a sliding gate 22, the arrangement being such that hot sand may be conveniently 60 withdrawn from the boot, so that it may be used to soften portions of the pavement-surface.

A second wagon 23 is formed by a pair of channel-irons 23", which are supported by 65 two pairs of suitable wheels 24 and 24" at the same height as the forward ends of channel-irons 7 of wagon 6. Secured to the forward ends of channel-irons 7 and 23" are angle-irons 25, the arrangement being such that 70 the forward ends of the two wagons may be secured together by means of bolts 26 passing through said angle-irons. Between channel-irons 23" is mounted a suitable melting-kettle 27 and the furnace therefor. Channel- 75 irons 23" extend a short distance in front of kettle 27, and upon these extending ends is mounted a suitable mixer 28. Mounted near mixer 28 and in position to receive sand from elevator 20 when the forward ends of the 80 two wagons are brought together is a sand-measuring bucket 29, and at the other end of the mixer is mounted an asphalt-measuring bucket 30. The arrangement of mixer 28 upon the extending ends of the channel-irons 85 23" is such that a small cart or wheelbarrow may be placed under the mixer in position to receive the prepared surfacing material as it is dumped therefrom. Mounted upon irons 23" at each side of the melting-kettle are run- 90 ning-boards 31, upon which the operator may stand to dip the melted material from the kettle into the measuring-bucket 30. It will of course be understood that the channel-irons 23" form a part of the running-boards, 95 for the reason that they support them and that the said channel-irons, together with the projecting ends of the running-boards, form a platform upon which the mixer is supported. A series of steps 32 may be pivoted at the 100 rear end of wagon 23, the arrangement being such that when the wagon is to be moved the steps may be swung up out of the way.

If desired, the chimneys of the furnaces

may be provided with a hinged portion which may be folded down when the wagons are being moved.

In use the two wagons are preferably secured together at their forward ends, so as to form an integral structure, and the outfit may be moved as a whole; but it is preferable to separate the two wagons and move each independently.

It will be noticed that each wagon is provided with such portions of the plant as may be independently used, so that each forms a unitary structure which may be separately used.

I claim as my invention—

1. A portable paving repair plant consisting of the following parts: a platform supported upon suitable wheels, one end of said platform being raised above the other, a power plant carried by said platform, a sand-drier mounted on said platform; a melting-kettle supported on suitable wheels, running-boards extending along the sides of said kettle and also around one end thereof, the said end portion forming a platform at substantially the same height as the raised end of the first platform, and a mixer mounted on said extended portion of the running-boards, at one end of the kettle, substantially as described,

whereby the sand-drier and kettle may be placed end to end with the mixer between them in position to receive material from both.

2. A portable paving repair plant consisting of the following parts: a portable platform consisting of the pair of side bars, supported by suitable wheels and each having one end raised above and substantially parallel with the other, a drier supported by said bars, an elevator extending from one end of the drier to one side thereof and provided with a boot located near the ground, and a power plant supported by said bars; a melting-kettle supported by suitable wheels, a pair of bars supported one upon each side of the kettle, at substantially the same height as the raised ends of the bars, and extending beyond one end of the kettle, a mixer supported by said bars upon said extended ends, and running-boards supported upon each side of the kettle, whereby the raised ends of bars and the extended ends of the bars supporting the mixer may be secured together.

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Witnesses:

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