

(No Model.)

2 Sheets—Sheet 1.

H. C. JONES.
MOTIVE FLUID SUPPLY AND DISCHARGE DEVICE FOR ROTARY POWER
DRIVEN MACHINES.

No. 569,924.

Patented Oct. 20, 1896.

FIG. 1.

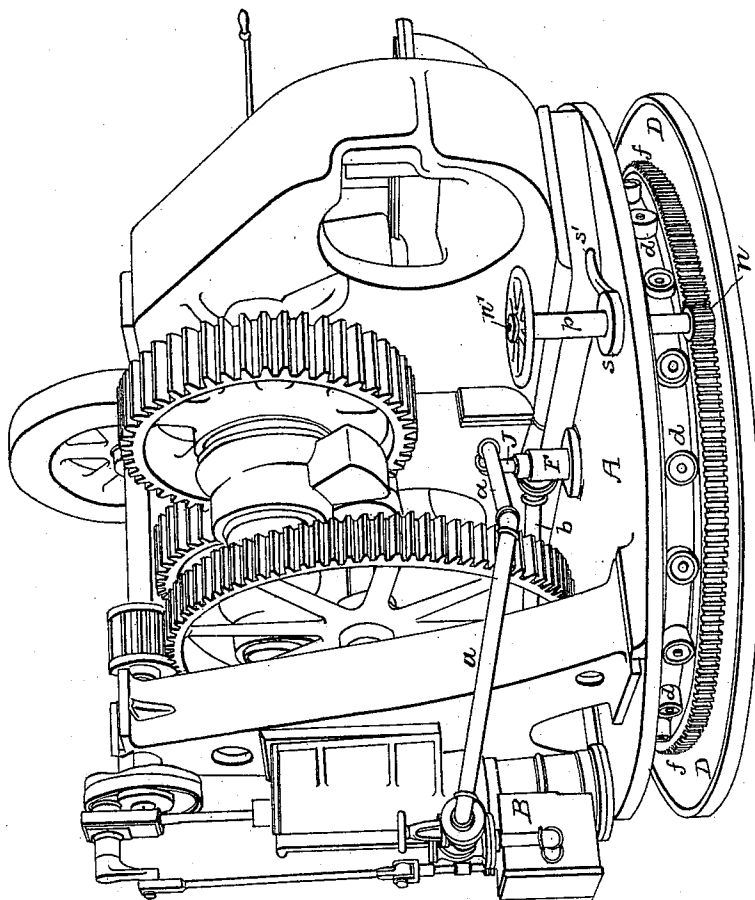


FIG. 5.

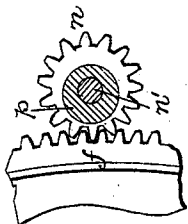
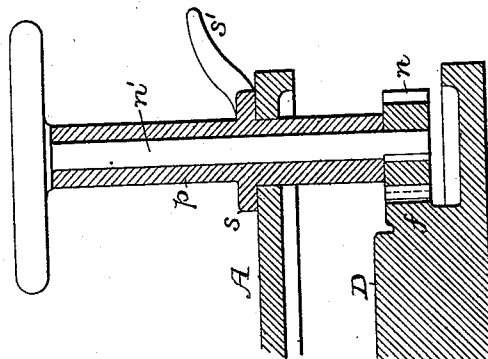


FIG. 4.



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FIG. 2.

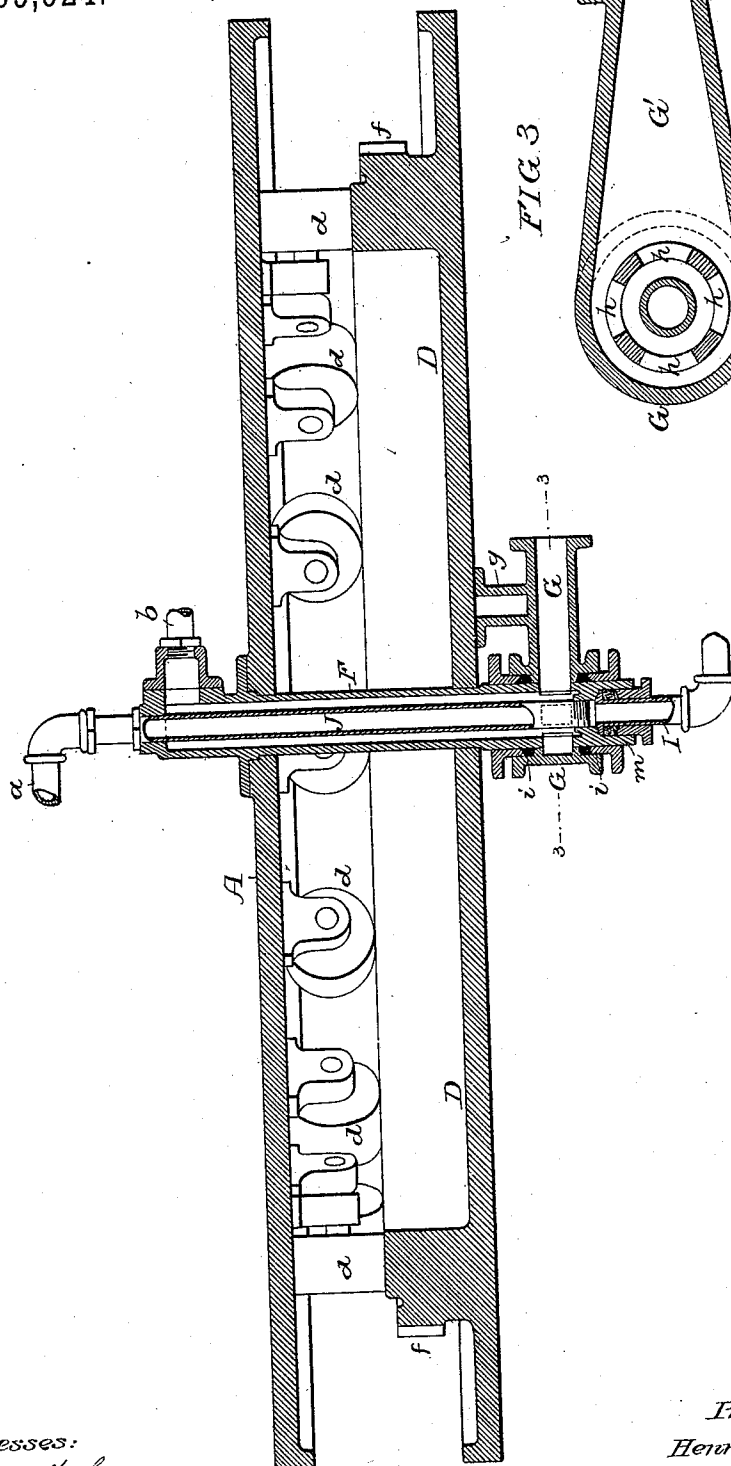
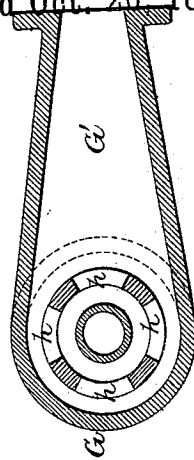


FIG. 3.



Witnesses:

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Inventor:

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by *his Attorneys*
Hewson & Hewson

UNITED STATES PATENT OFFICE.

HENRY C. JONES, OF WILMINGTON, DELAWARE, ASSIGNOR TO THE HILLES
& JONES COMPANY, OF SAME PLACE.

MOTIVE-FLUID SUPPLY AND DISCHARGE DEVICE FOR ROTARY POWER-DRIVEN MACHINES.

SPECIFICATION forming part of Letters Patent No. 569,924, dated October 20, 1896.

Application filed September 30, 1895. Serial No. 564,149. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. JONES, a citizen of the United States, and a resident of Wilmington, Delaware, have invented certain Improvements in Motive-Fluid Supply and Discharge Devices for Rotary Power-Driven Machines, of which the following is a specification.

The object of my invention is to provide simple and efficient means for conveying motive fluid to and from a rotating machine having an engine mounted thereon. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a rotary shearing-machine having my invention applied thereto. Fig. 2 is an enlarged transverse section of the bed and turn-table of the machine with my improved motive-fluid supply and discharge device illustrated in connection therewith. Fig. 3 is a sectional plan view, on an enlarged scale, taken on the line 3 3, Fig. 2. Fig. 4 is a vertical sectional view of the locking device for the turn-table, and Fig. 5 is a sectional plan view of the same.

I have illustrated my invention in connection with a rotary shearing-machine mounted upon a turn-table A and having an engine B, whereby the machine is driven, this engine having a motive-fluid supply-pipe *a* and exhaust-pipe *b*; but it should be understood that my invention is applicable to any form of rotating machine having on the rotating part an engine or other motor to which motive fluid is to be supplied and from which it is to be exhausted.

In the present instance the turn-table A has rollers *d*, running on ways on the bed or foundation D, which has a rack *f*, meshing with a pinion *n*, carried by a shaft *n'*, adapted to bearings in a sleeve *p*, mounted on the turn-table so as to be free to turn thereon, said sleeve *p* having a flange *s* with projecting arm or handle *s'*.

The shaft *n'* is eccentrically mounted in the sleeve *p*, and when the latter is in the position shown in Figs. 4 and 5 the pinion *n* is in proper mesh with the rack *f* and the turn-table can be rotated by turning the shaft. When, however, the sleeve *p* is turned part way

around by means of the arm *s'*, the pinion *n* will, owing to the eccentricity of the shaft *n'* in respect to the sleeve, be forced firmly into engagement with the teeth of the rack *f*, so that it cannot be turned. Hence the turn-table will be locked in position until the parts are restored to the position shown in Figs. 4 and 5.

Axially disposed in respect to the turn-table A and the bed D, and suitably secured to said turn-table so as to rotate therewith is a tube F, projecting above the turn-table A and below the bed D, in which it can freely turn. To the upper projecting portion of said tube F is suitably secured the exhaust-pipe *b*, while the lower projecting end of the tube passes through a chest G, located beneath the bed and communicating with a discharge-pipe *G'*, which has a hollow stud *g*, whereby it is secured to the under side of the bed.

The tube F has ports *h*, through which it communicates with the chest G and pipe *G'*, and the chest is provided above and below this ported portion of the tube F with stuffing-boxes *i*, so that the tube is free to turn in the chest without any liability of leakage of motive fluid therefrom.

The tube F is contracted in diameter near its lower end, so as to form a seat for the flanged upper end of the motive-fluid supply-pipe I, which occupies a fixed position below the bed, leakage around said flanged end of the fluid-supply pipe being prevented by means of a stuffing-box *m* in the lower end of the tube F.

Screwed into the contracted lower portion of the tube F is the threaded lower end of a tube J, which passes through the top of the tube F and is connected to the supply-pipe *a* of the engine.

It will therefore be seen that the turn-table A and the parts carried thereby can be rotated without any likelihood of leakage of the motive fluid either in its passage to or from the motive-power engine, the motive fluid being both conveyed to and taken away from the machine from a point below the bed-plate D, so that the necessary supply and discharge pipes can be buried in a trench or conduit in order to be entirely out of the way.

If desired, the device may be used in the

reverse way, that is to say, the pipe G' may be the inlet-pipe and the pipe I the exhaust-pipe.

Having thus described my invention, I
5 claim and desire to secure by Letters Patent—

10 The combination of a rotating power-driven machine having the motor located on the rotating element of the machine, with axially-located motive-fluid supply and discharge tubes, one inside of the other, said tubes being secured together at each end and the outer tube passing through the rotating element of the machine and through a fixed cas-

ing, and having ports within said casing, 15 stuffing-boxes for said tube at opposite sides of the casing, a fixed fluid-pipe communicating with the interior of the casing, and a second fixed fluid-pipe having a swiveled connection with the projecting end of the outer 20 tube, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY C. JONES.

Witnesses:

FRANK E. BECHTOLD,
JOS. H. KLEIN.