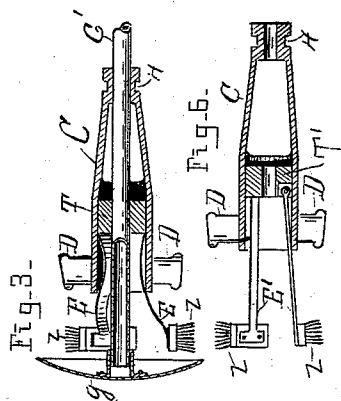
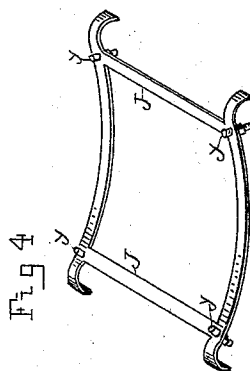
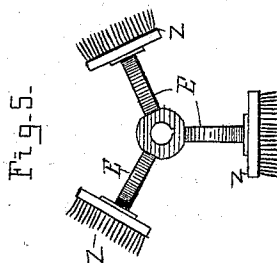
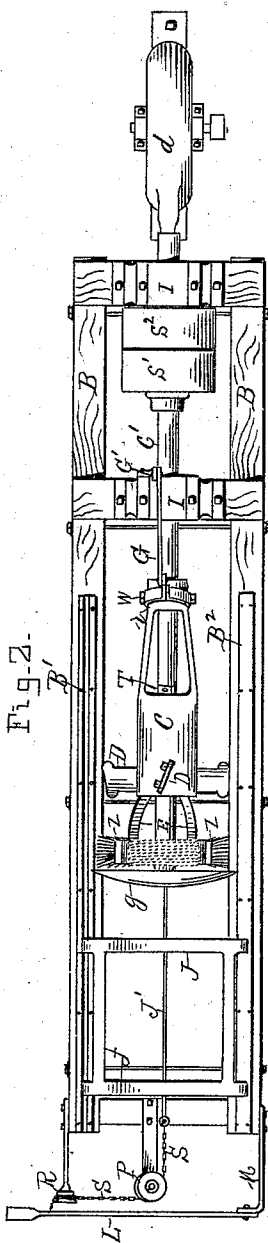
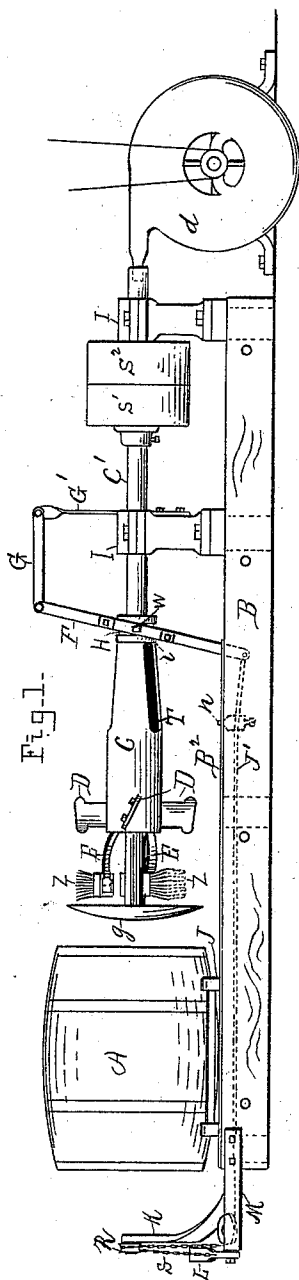


(No Model.)

J. WINTERBOTHAM.
BARREL WASHER.

No. 542,669.

Patented July 16, 1895.



Witnesses:

Ray J. Hutchins
Jose M. Bray

Inventor:

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UNITED STATES PATENT OFFICE.

JOSEPH WINTERBOTHAM, OF JOLIET, ILLINOIS.

BARREL-WASHER.

SPECIFICATION forming part of Letters Patent No. 542,669, dated July 16, 1895.

Application filed March 18, 1895. Serial No. 542,278. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WINTERBOTHAM, a citizen of the United States of America, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Machines for Cleaning the Interior of Barrels, of which the following is a specification, reference being had therein to the accompanying drawings, and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a side elevation of the machine as it would appear ready for operation. Fig. 2 is a plan view of Fig. 1, omitting the barrel. Fig. 3 is a longitudinal section of the head for holding the brush-arms and a side view of the shaft to which it is attached, a portion of said shaft being shown in section to show that it is hollow, and a central section of the concave disk on the end of the shaft, and a longitudinal section of a reciprocating sleeve on said shaft and head for contracting and expanding said brushes. Fig. 4 is a perspective view of the carriage for holding a barrel. Fig. 5 is an end view of the revolving brush and its head. Fig. 6 a longitudinal section showing the brush-arms pivotally attached to the head on the shaft.

This invention relates to certain improvements in machines for cleaning the interior surface of new barrels, and particularly for removing charred material from their inner surface by means of rotating brushes driven at high speed, which improvements are fully set forth and explained in the following specification and claims.

Referring to the drawings, B represents the bed-frame of the machine, provided near one end with a pair of boxes I I, in which is journaled a shaft c' , which is hollow and having a fast pulley S' and a loose pulley S^2 , which said fast pulley is intended to be driven by a belt for the purpose of driving said shaft and brushes. The outer end of said shaft is provided with a head T, to which is attached the spring-arms E, having brushes Z secured to their outer ends and preferably made of spring-steel.

C is a sleeve arranged near the outer end of said shaft in such manner as to extend out beyond the head T over the brush-arms E and is for the purpose of regulating or adjusting

the throw of said arms and for contracting the outer ends of the said arms when it is desired to insert the brushes into the barrel, the said sleeve being adapted to move endwise on said shaft for said purpose, as is hereinafter set forth. The inner end of said sleeve is provided with an annular groove H for receiving pins W W of the collar r of a lever F. The upper end of said lever is connected to the upper end of a standard G' through the medium of a link G, and the lower end of said lever is pivotally connected to the inner end of a rod J', having a chain S, attached to its outer end, passing over the pulleys P and R and connecting with a foot-lever L, the inner end of which is pivotally connected to the arm M.

J is a carriage resting on ways B' and B² of bed-frame B for holding a barrel A, as shown in Fig. 2, in such position that when the said carriage moves forward on the ways it will carry said barrel so as to inclose said brushes within it. When it is desired to employ the brushes for cleaning out the interior of the barrel, it is placed upon the carriage J, the set-screws y being turned up to meet the barrel so it will not roll. The carriage with the barrel is then moved forward, so as to inclose the brushes Z within it, until the carriage engages a lug n on rod J' and moves said rod with the carriage, and thus, through the medium of lever F, moves sleeve c backward along on the arms E for the purpose of permitting the centrifugal motion of the brushes to expand them, so as to cause them to come in contact with the inner sides of the barrel. The brushes being in motion, by means of a belt, power applied to pulley S' will cause said brushes to be expanded by their centrifugal force and accommodate themselves to the irregularities of the inner surface of the barrel, thereby removing any char, dirt, or other objectionable matter, which is removed from the barrel by means of an air-blast driven through hollow shaft c' by means of a fan-blower d , the air-blast being driven against the concave surface of a disk g attached to the outer end of said shaft, and also by means of a suction-fan D on the sleeve c , which sleeve is caused to rotate with the shaft by means of its contact with said brush-arms. As the brushes rotate, the barrel

and its carriage are slowly moved backward until nearly free from the brushes, when the sleeve *c* is returned to contact with the brush-arms by means of pressing down on the outer
5 end of the foot-lever *L*, when the barrel may be removed and replaced by another barrel for similar treatment.

The arms of the brushes, instead of being spring-arms, may be rigid arms and pivotally
10 attached to the brush-head *T'*, as shown at *E'* in Fig. 5; also, instead of brushes, any other device or tool may be attached to said arms for treating the barrel in any other manner that may be desirable.

15 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. In a machine for cleaning the interior of barrels, the combination of a hollow shaft
20 mounted in bearings, arms secured to the shaft end, provided with brushes at their

outer ends, a concave disk secured to the end of the shaft, a fan blower communicating with the other end of the shaft, a sleeve mounted on the shaft, and means for adjust- 25 ing it, means for rotating the shaft, and means for rotating the fan blower, all substantially as described.

2. In a machine for cleaning the interior of barrels, the combination of a shaft mounted
30 in bearings, arms secured to the shaft and provided with brushes at their outer ends a sleeve mounted on the shaft and means for adjusting it, blades or fans on said sleeve for removing refuse matter from the barrel be- 35 ing cleaned, means for rotating the shaft, and means for supporting the barrel all substantially as described.

JOSEPH WINTERBOTHAM.

Witnesses:

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