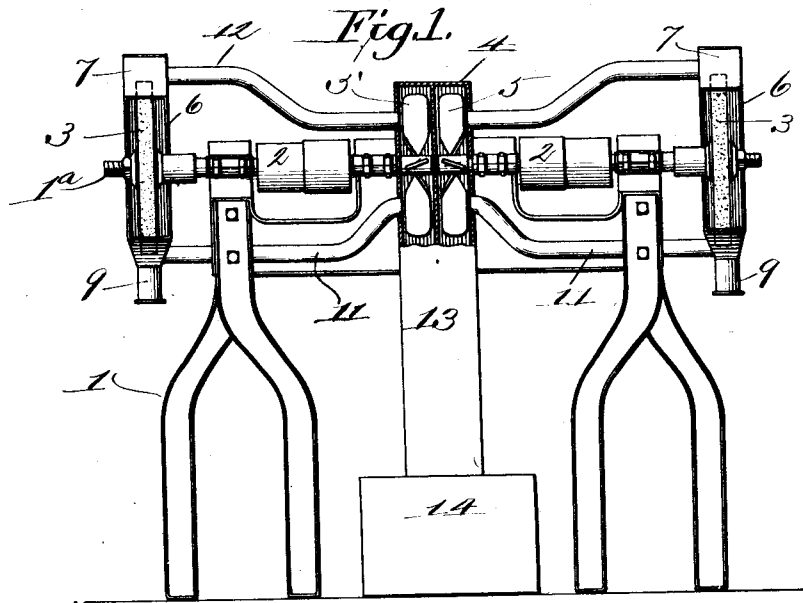
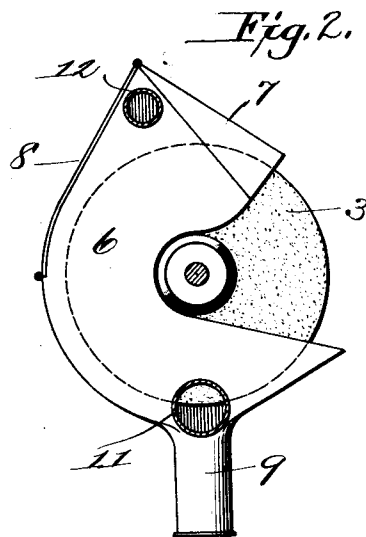
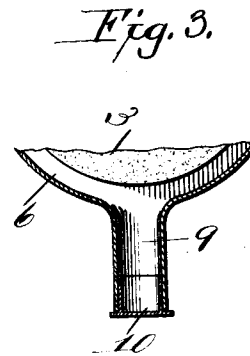


C. F. ATHY.
ATTACHMENT FOR LATHES.
APPLICATION FILED SEPT. 21, 1912.

1,086,745.

Patented Feb. 10, 1914.



Witnesses
W. Stafford, Jr.
E. B. M. Bath

Inventor
C. F. Athy.
By Chas. E. Brock
Attorney

UNITED STATES PATENT OFFICE.

CLARENCE F. ATHY, OF MANSFIELD, OHIO, ASSIGNOR TO THE JOHNSTON & JENNINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

ATTACHMENT FOR LATHES.

1,086,745.

Specification of Letters Patent.

Patented Feb. 10, 1914.

Application filed September 21, 1912. Serial No. 721,624.

To all whom it may concern:

Be it known that I, CLARENCE F. ATHY, a citizen of the United States, residing at Mansfield, in the county of Richland and the State of Ohio, have invented a new and useful Improvement in Attachments for Lathes, of which the following is a specification.

This invention relates to polishing and grinding lathes and the invention comprises a spindle, driving mechanism, polishing or grinding wheel, fan casing and suction fan, and dust collecting and clean out means as a single unit.

The invention relates directly to improvements in the dust collecting apparatus.

It is common to employ a single fan for a large number of lathes, making the fan and fan casing in proportion to the number of lathes served. This is wasteful of power as the same power is required to drive the fan when only one or two lathes are being used as when all are in use. The use of a single fan for a number of lathes or the placing of several lathes upon a common spindle, also prevents ready changing of the position of an individual lathe. But the most serious objection to the ordinary arrangement lies in the fact that the dust is collected from the lower portion of the fan casing only. But the speed of the wheel is usually so great that the finer particles, the fine dust so injurious to the health of the operatives, is carried by the current of air set up in the hood around the periphery of the wheel and discharged at the top into the face of the workman. This is avoided by me by providing dust collectors at the top also and slightly to the rear of the vertical diameter of the wheel.

With these objects in view the invention consists in the novel features of construction shown in the accompanying drawings, and pointed out in the claims.

In the drawings: Figure 1 is a front view, a fan casing being in section. Fig. 2 is a side sectional view of a wheel hood. Fig. 3 is a detail section through the lower portion of the hood, taken at right angles to Fig. 2.

In these drawings 1 represents the supporting frame having two spindles 1^a mounted thereon, said spindles being provided with the usual drive pulleys 2. These spindles are in alinement with each other

and suitable grinding or polishing wheels 3 are mounted on their outer end portions. The inner ends of the spindles are mounted in a fan casing 4, divided into two compartments, and the inner ends of the spindles carry fans 5, one in each compartment. It will be noted therefore that each wheel and fan is driven as a single unit, irrespective of use of the adjacent fan and wheel, and there is no communication between the compartments of the fan casing. Each wheel is partially inclosed by a hood 6, each hood having a flanged, hinged top 7, and a hinged back plate 8, to which the top is hinged. This enables the hood to be readily opened for purpose of removing the wheel. Collector pipes 11 run from the lower portion of each hood to the lower portion of the fan casing, each pipe discharging the heavier particles from one hood into one compartment of the fan casing. A pipe 12 somewhat smaller in diameter than the pipes 11 runs from the upper rear portion of each hood to one of the fan compartments. Each hood is provided with a depending clean out spout 9 the lower end of which is normally closed by a friction cap 10. The fan casing is also extended downwardly as at 13, leading to a dust receptacle 14. The pipes 12 will collect the fine dust that would otherwise be thrown out of the front of the hoods, and if any small article being ground or polished is drawn from the hands of the workman it will pass into the spout 9 and dislodge the cap, and fall to the floor from which it can be recovered without appreciable loss of time.

What I claim is:—

1. A device of the kind described comprising two spindles in horizontal alinement, grinding wheels mounted respectively upon said spindles, means for driving each of said spindles independent of the other, a fan casing into which each of said spindles extends, a fan carried by the inwardly extending portion of each spindle, hoods partially inclosing said grinding wheels, upper and lower pipes leading respectively from said hoods to said common fan casing, and a dust collector in communication with said casing and common to both of said wheels.

2. In a unit of the kind described, spindles in alinement, grinding wheels there-

on, a fan casing inclosing the inner ends
of the spindles, the casing being divided
into two non-communicating compartments,
fans mounted on the spindles, one fan being
5 arranged in each compartment, and upper
and lower pipes leading from the hoods to
the fan casing, each hood having communi-

cation through said pipes with one com-
partment.

CLARENCE F. ATHY.

Witnesses:

W. H. GIFFORD,
JNO. L. YOUNG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."