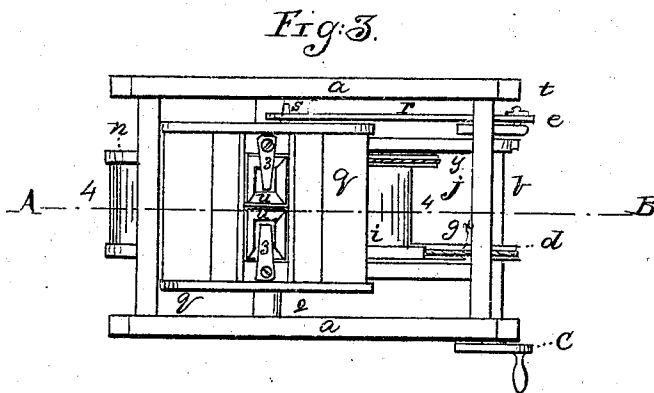
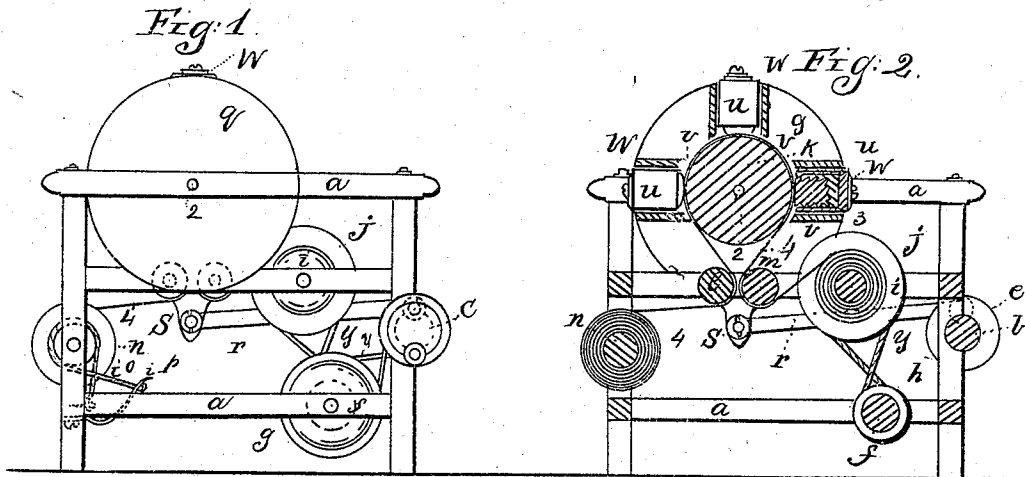


A. & G. F. Wright
Paper Polishing Mach.
N^o 110,947. Patented Jan. 10, 1871.



Witnesses:
C. F. W. Parkhurst
H. J. Brown

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ABRAM WRIGHT AND GEORGE F. WRIGHT, OF CLINTON, MASSACHUSETTS,
ASSIGNORS TO THEMSELVES AND JOHN H. McNABB, OF SAME PLACE.

Letters Patent No. 110,947, dated January 10, 1871.

IMPROVEMENT IN PAPER-POLISHING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

We, ABRAM WRIGHT and GEORGE F. WRIGHT, of Clinton, in the county of Worcester and State of Massachusetts, have invented certain Improvements in Machines for Polishing Paper, of which the following is a specification.

Nature and Object of the Invention.

The first part of our invention relates to the use of three or more independent pieces of flint, or any suitable material, when used conjointly upon the surface of a continuous strip of paper, for polishing the same, the object of this part of our invention being to employ a large number of pieces of flint to come in contact with the paper, instead of one piece as used in the present process, thereby greatly increasing the facility for polishing paper, with much less expense; also, to simplify the art of grinding the flints to produce a suitable surface to rest upon the paper, a straight surface being much more easily obtained than the present oval form of materials used.

The second part of our invention relates to the manner of holding the said flints, which consists in the use of boxes or sockets, in which the larger portion of the flints are imbedded in calcined plaster, cement, lead, or any suitable substance, thereby holding them in a positive and substantial manner.

Description of the Accompanying Drawing.

Figure 1 is a side elevation of a machine embodying our invention.

Figure 2 is a vertical transverse section through the dotted black line from A to B in fig. 3.

Figure 3 is a plan of the machine.

General Description.

a is the frame of the machine, which frame should be substantially constructed to resist the vibrations of operating parts;

b is the driving-shaft, having secured to it the hand-wheel *c*, grooved pulley *d*, and crank-wheel *e*;

f is an intermediate shaft, having secured to it the grooved pulleys *g* and *h*;

i is the paper-beam, having secured to one end the grooved pulley *j*;

k is a cylinder;

l and *m* are guide-rolls;

n is the paper-beam No. 2;

o is a friction-strap;

p, a spring secured to the frame *a*; and

q is the oscillating flint-holder, having for its axis the shaft 2 of cylinder *k*.

r is a connecting-rod between the studs *s* in the holder *q* and the stud *t* in the crank-wheel *e*.

u u u are sockets containing flints.

v v v are flints in said sockets.

3 is calcined plaster or other suitable imbedding substance around said flints.

w w w are springs, arranged to press upon the sockets *u u u*, which rest upon the paper 4 upon the cylinder *k*.

The paper 4, to be polished, is wound upon the beam *n*; then passing around the guide-roll *l*, cylinder *k*, and guide-roll *m*, it is secured to the beam *i*.

This being done, by turning the hand-wheel *c* motion is communicated to the shaft *f* by the belt *x* and pulleys *d* and *g*; thence to the paper-beam *i* by the belt *y* and pulleys *h* and *j*, and by the same motion of hand-wheel *c*, the flint-holder *q* is made to oscillate upon its axes by the connecting-rod *r* attached to studs *s* and *t*; and the flints *v v v*, being suitably prepared, are pressed upon the paper 4, upon the cylinder *k*, by the springs *w w w*. The paper is polished while it is being drawn in its course from beam *n* and wound upon beam *i*, and the paper is made to lie closely upon the cylinder *k* by the action of the strap *o* and spring *p* upon the shaft of said beam.

Claims.

We claim as our invention—

1. Three or more independent pieces of flint, *v v v*, or other suitable substance, used conjointly on the same piece of paper 4, for the purpose hereinbefore set forth.

2. The flint *v*, the imbedding substance 3, and the socket *u*, when used substantially as and for the purpose hereinbefore set forth.

3. The spring *w*, when used substantially as and for the purpose hereinbefore set forth.

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