

G. L. OTT.

Composition for Grinding and Polishing Wheels.

No. 155,461.

Patented Sept. 29, 1874.

FIG. I.

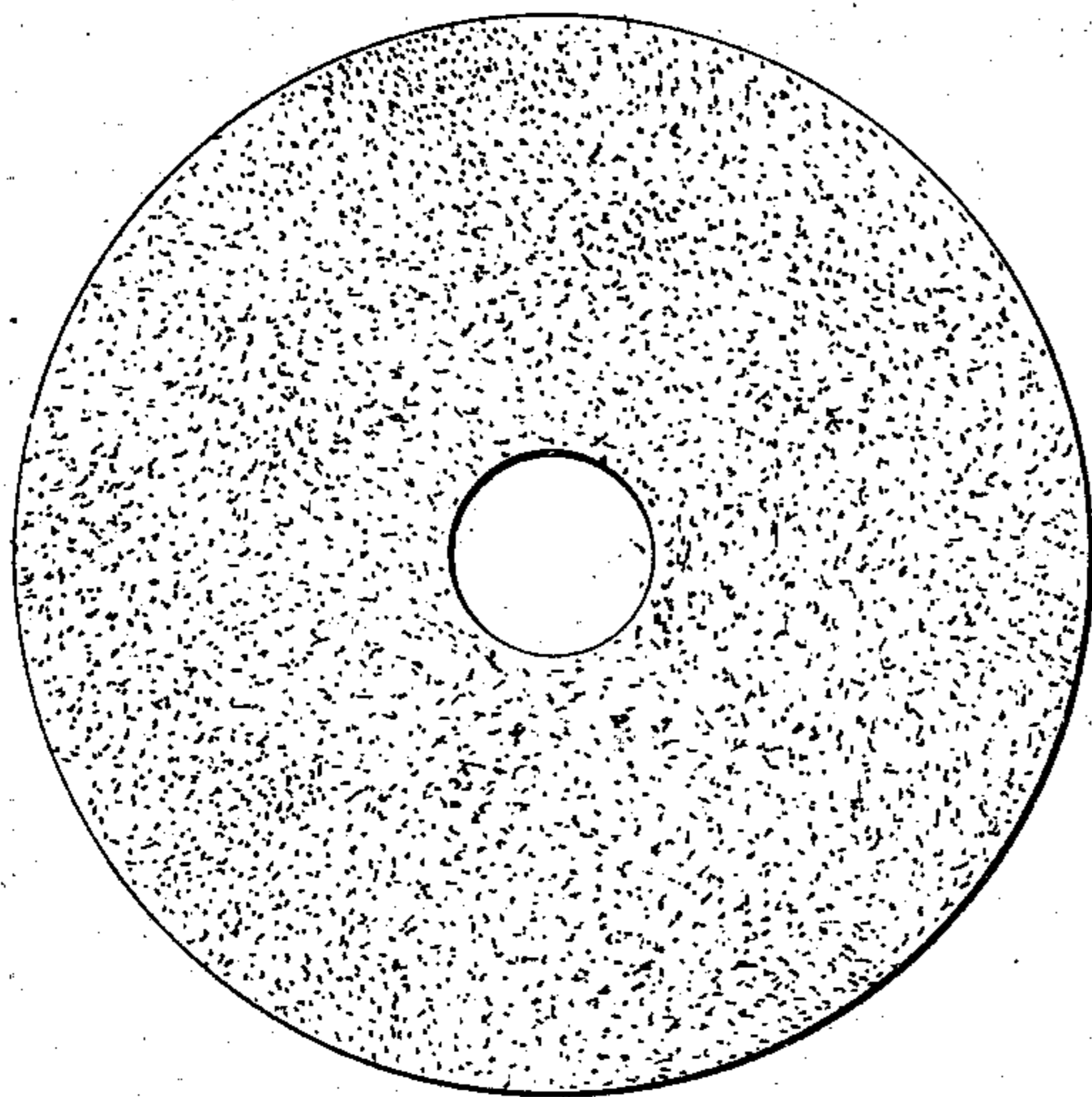


FIG. II.

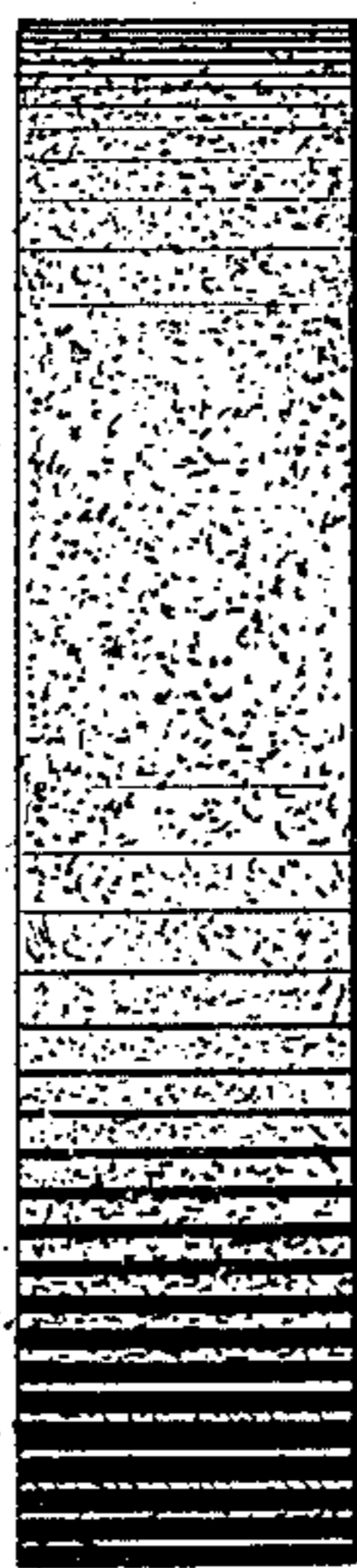
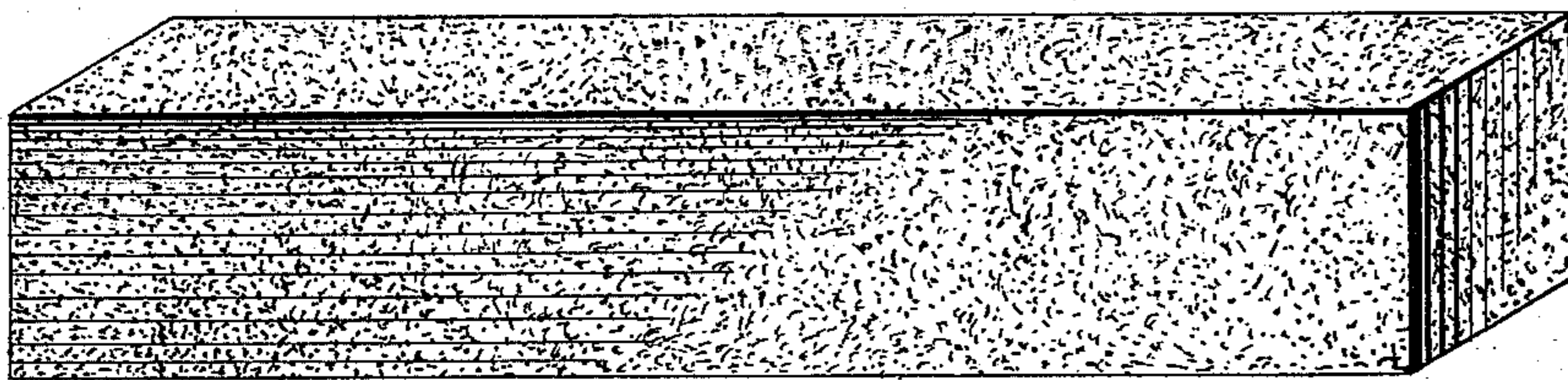


FIG. II.



WITNESSES:

Aug. Dittus
Chas. Seymonds

INVENTOR.

George L. Ott.

UNITED STATES PATENT OFFICE.

GEORGE L. OTT, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN COMPOSITIONS FOR GRINDING AND POLISHING WHEELS.

Specification forming part of Letters Patent No. **155,461**, dated September 29, 1874; application filed August 5, 1874.

To all whom it may concern:

Be it known that I, GEORGE L. OTT, of the city of Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Compounds for Grindstones, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a side view, and Fig. 2 an edge view, of a grindstone. Fig. 3 is a perspective view of an oil-stone, &c.

My improvement relates to artificial grindstones for the variety of uses for which such stones may be used—such as grindstones for machine-shops, foundries, &c.—for grinding and polishing of all kinds of metals, rough castings of brass or iron, glass, tools of all kinds, scythes, saws, &c. They may be used with or without water, and for oil-stones for artisans generally.

To better illustrate the proportions of my compound, I will give those for one pound of grindstone: I first grind four and one-half ounces of clay to powder, and mix with it nine ounces of emery; next one ounce of Vienna chalk; then one ounce of ground or pulverized glass, and, finally, one ounce of dissolved gum-arabic to make it adhere together. This mixture is placed in suitable molds of any desired

shape or size, and pressed, if desired. These blocks are then dried, and finally burned in a kiln or oven, the degrees of burning being varied, according to the different uses for foundries, machinery, tools, emery-wheels, &c.

The great advantages of these stones are, that they are durable, hard, and will last a long time, when used either with or without water. They can be used for polishing-wheels, for grinding and polishing of all kinds of metals, brass or iron, rough or smooth, castings, tools, &c. Another great advantage is, that they will not burn steel and similar articles when grinding, which is so often the case with other kinds of stone. They will not shed, and therefore need not be recut, as ordinary stones, by which so much is wasted, but always run true and wear evenly.

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

The compound herein described for grinding and polishing metals, made by combining powdered clay with emery, Vienna chalk, ground or pulverized glass, and dissolved gum-arabic, substantially in the proportions described.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

GEORGE L. OTT.

Witnesses:

MARTIN KRATT,
ALBERT STURM.