

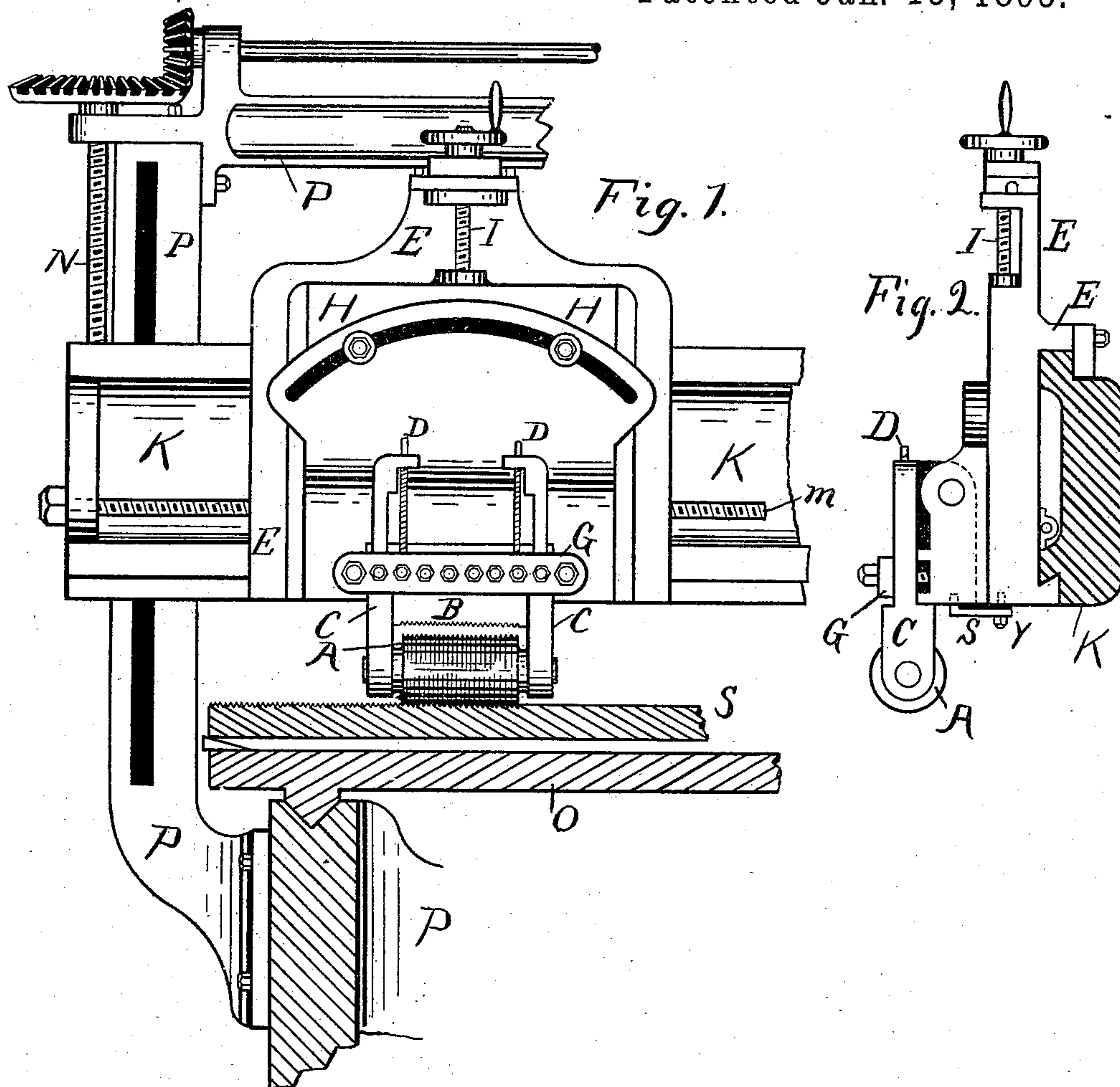
(No Model.)

2 Sheets—Sheet 1.

H. W. CLARKE & J. N. WALKER.
STONE WORKING TOOL.

No. 532,445.

Patented Jan. 15, 1895.



WITNESSES:

George & Glennday
Geo M Howell

H. W. Clarke
J. N. Walker

INVENTORS

BY

J. E. Bookstaver ATTORNEY

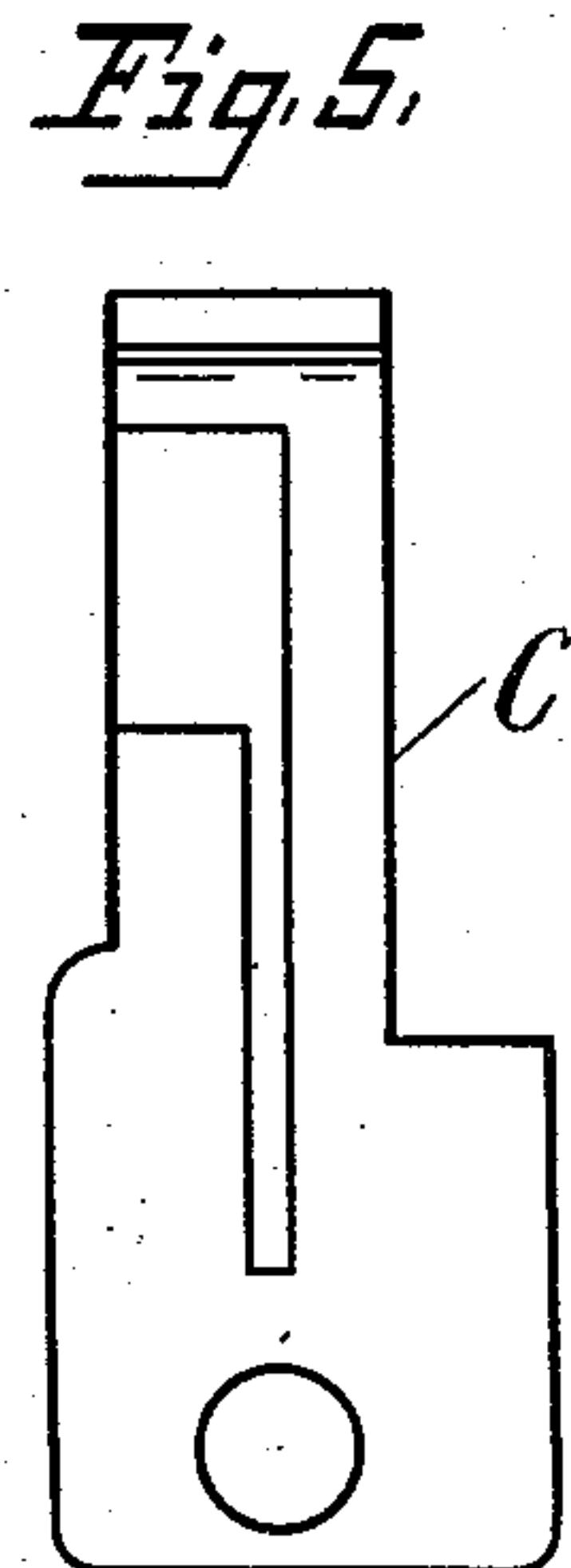
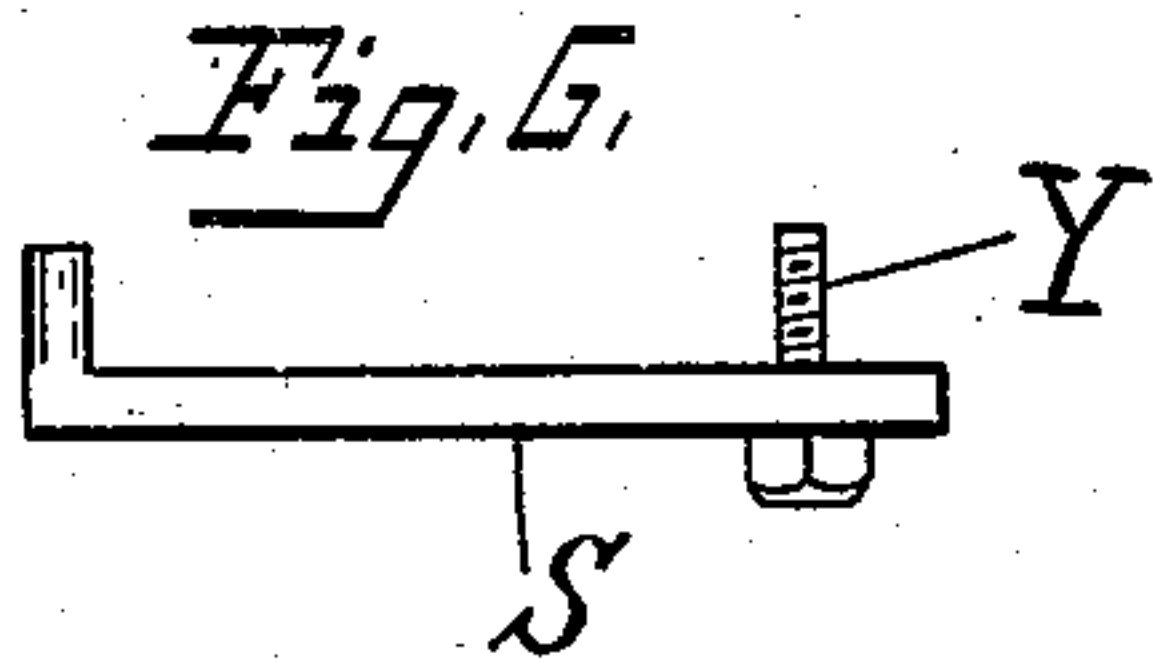
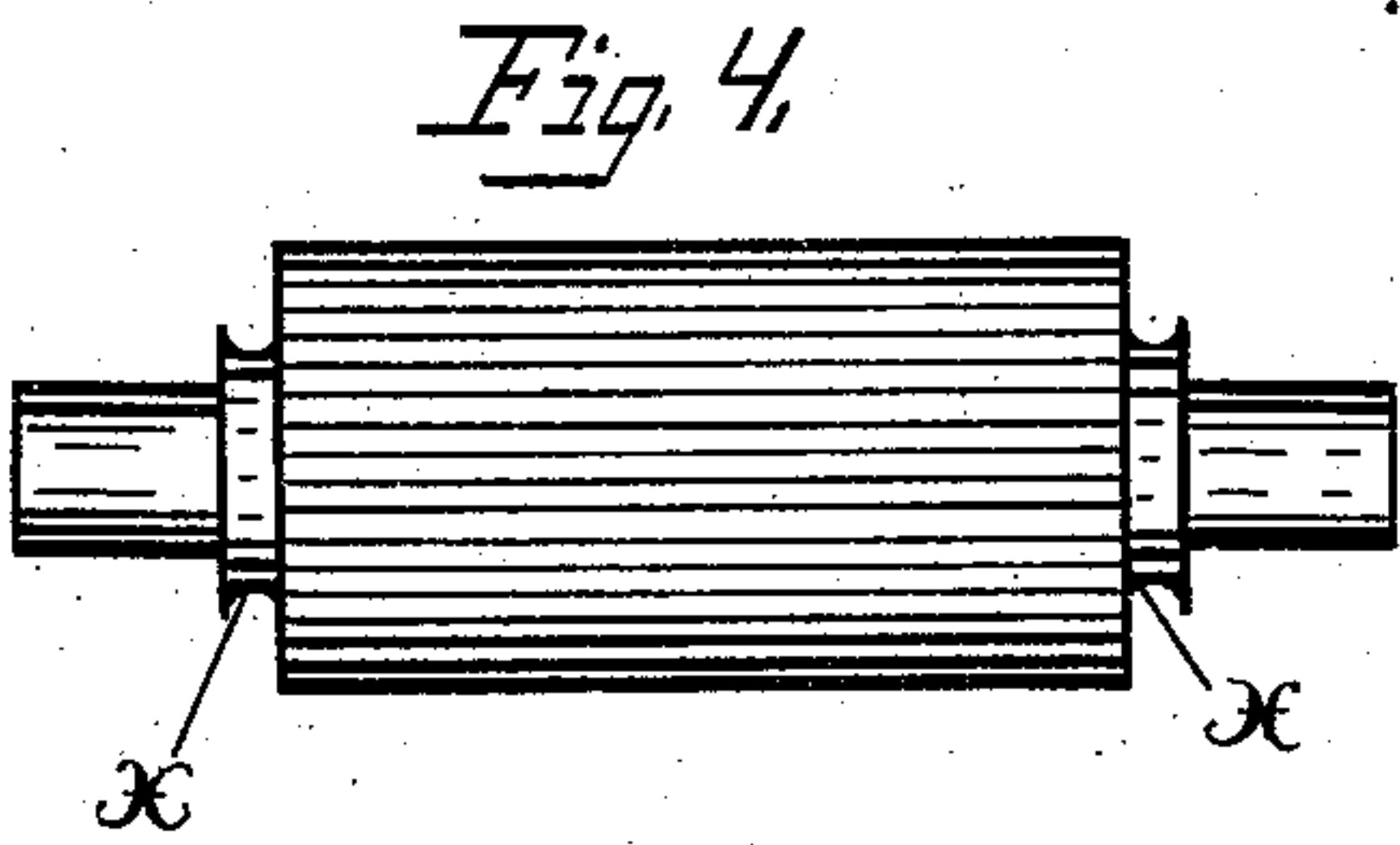
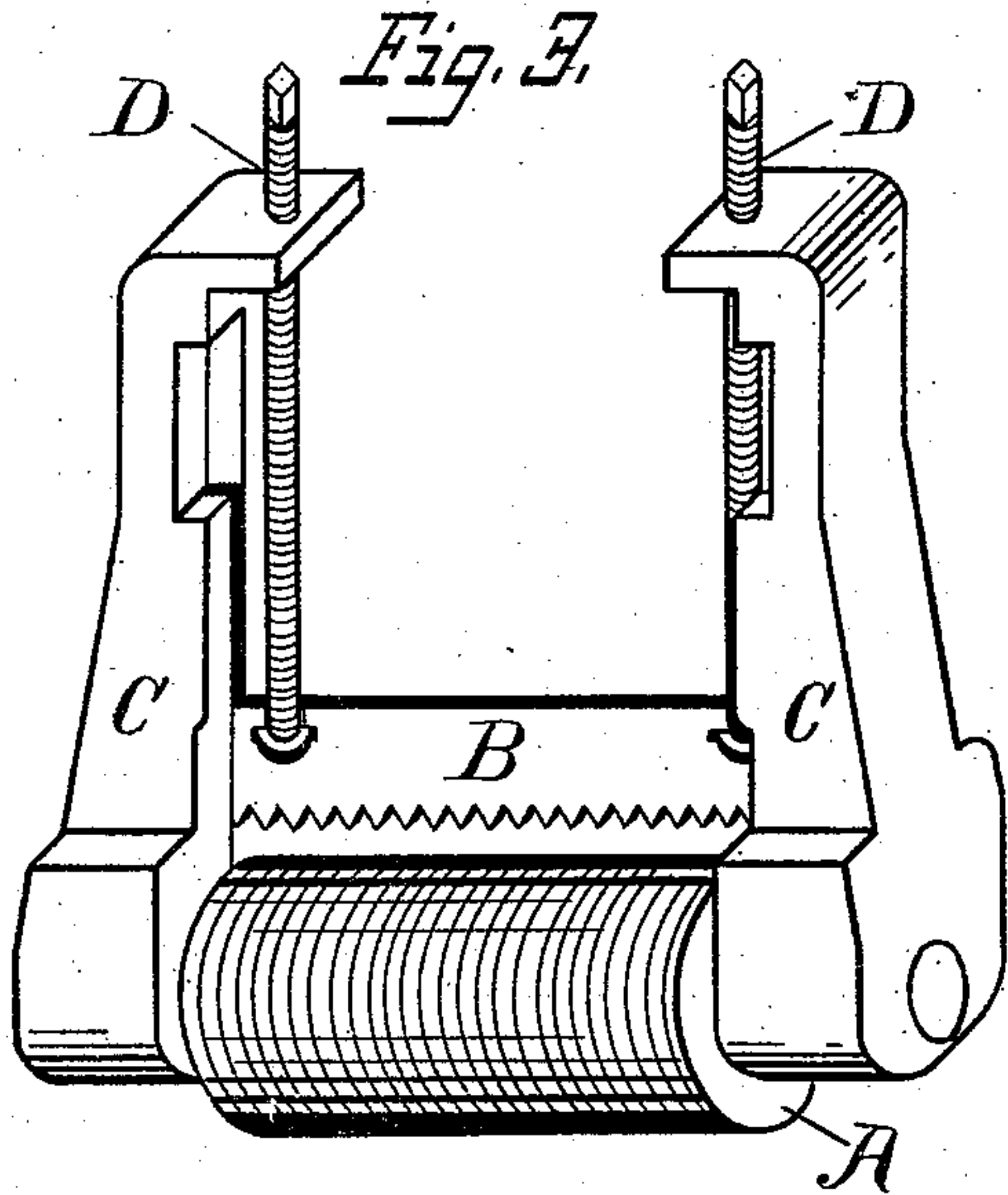
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2 Sneets—Sheet 2.

H. W. CLARKE & J. N. WALKER.
STONE WORKING TOOL.

No. 532,445.

Patented Jan. 15, 1895.



WITNESSES:

George E. Plumb
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UNITED STATES PATENT OFFICE.

HERBERT WILLIAM CLARKE AND JOHN NORMAN WALKER, OF OXFORD,
NEW YORK.

STONE-WORKING TOOL.

SPECIFICATION forming part of Letters Patent No. 532,445, dated January 15, 1895.

Application filed April 14, 1894. Serial No. 507,574. (No model.)

To all whom it may concern:

Be it known that we, HERBERT WILLIAM CLARKE and JOHN NORMAN WALKER, citizens of the United States, residing at Oxford, in the county of Chenango and State of New York, have invented certain new and useful Improvements in Stone-Working Tools; and we do hereby declare that the following specification is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part thereof.

Our invention relates to improvements in tools for use in combination with stone planing machines; and the object of our invention is to provide tools to be attached to and used in combination with such machines for the purpose of finishing the faces and edges of stone.

We attain our object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a front elevation of a part of the stone planer with our improved tools attached. Fig. 2 represents a side view, partially in section, of the planer head showing the improved tools attached. Fig. 3 is a view in perspective of our improved tools detached from the machine, and upon a larger scale. Fig. 4 is a front elevation of the cylindrical tool showing the longitudinal grooves and dust grooves. Fig. 5 is a side elevation of one of the hangers showing the inner side of it. Fig. 6 is a side elevation of the clasp hook.

In Fig. 1, the letter (A) indicates a part of our combination tool, and letter (B) another part of said tool in position in the hanger and clamped in the planer head by the clamp (G), which is a part of the planer head, and on the apron of the planer head.

In Fig. 2, (A) indicates a side view of a part of the combination tool, the other part of it being out of sight. It also shows the hangers (C), the clamp (G), and the main part of the planer head.

In Fig. 3, (A) represents a cylinder, part of our combination tools; (B), the scraper part; (C), the hangers, and (D) the adjusting screws.

In Fig. 4 is shown a different form of cyl-

inder having the cutting grooves running laterally upon the face of the cylinder, which is sometimes used in place of the grooves running around the cylinder, as shown in Fig. 3.

The cylinder (A) is composed of solid steel with its surface cut into either circular or longitudinal grooves with sharp cutting edges between the grooves, tempered for use upon hard stone, and is secured by journals in the hangers (C). Between the main part of this cylinder and the hanger, the neck of the cylinder is cut in a concave groove in order that it may catch dirt and dust from the revolving wheel and throw it off, instead of clogging the cylinder journals. Above this cylinder, working up and down in grooves in the hangers (C), is the metal scraper (B), the edge of which where it would come in contact with the cylinder, is cut in points to fit and engage the corresponding grooves in the cylinder, when pressed down upon it. Attached to the top of this scraper are two screw rods (D) running up and through a lug upon the top of the hangers (C), and by which the scraper (B) can be lifted or lowered in its groove to engage the cylinder, or to be free from it.

It is well known to parties operating stone planers that the apron of the head of the stone planer is constructed to swing outward with its tool when the stone, which is being operated upon, is drawn backward, thus releasing the pressure of the tool upon the stone. With our tool, we may desire to have its pressure kept up while moving the stone backward. In order to do this, we use the clasp hook (S), Fig. 2, which is a simple bar with bolt hole in one end and a lug on the other end, the lug made to fit into an opening (S S) in the apron head (F), and the other end being secured to the planer head (E) by the screw bolt (Y), thus preventing the tool being thrown out of pressure when the stone is drawn backward. The scraper (B) is adjusted to engage with the grooves of the cylinder (A). During the operation, all particles of stone or dirt which may fasten themselves into said grooves, will be scraped out of them by the points of the scraper, and fall back on the stone, or drop upon the dust groove (X), as shown in Fig. 4, and so off of the tool. This cylindrical tool (A) may be made with

longitudinal grooves or circular grooves, and in use it is pressed tightly on to the stone under it by the pressure screw (I), and as the stone moves along under the tool, the surface
5 is squeezed and cut into what is termed a line finish, being a series of small parallel grooves which gives a finish to the face of the stone. It may also be used to ornament stone by cutting the surface of the cylinder in fancy
10 patterns instead of lateral or circular grooves.

In Fig. 1, a section of stone (S'') is represented as passing under the tool upon the reciprocating bed (O). The hangers (C) are
15 screwed to the planer head in a similar manner to that in which all stone working tools are secured to such machinery, by being clamped in the jaws (G).

We are aware that the metal cylinder with grooves upon its surface has been used as a
20 tool for working stone, but it was used for a different purpose and in a different manner,

being thrown or brushed against the stone to reduce its rough surface, while our metal cylinder is used in a different manner, that of steady pressure, and for a different purpose, 25 that of finishing the surfaces of the stone, already smooth, instead of reducing rough stone down. It is also capable of doing much other work which other cylinders have never been used for, that of ornamenting stones. 30

What we claim as our invention, and desire Letters Patent for, is—

In a stone dressing machine, the combination with the reciprocating bed (O), of the cylinder (A), grooves (X), hangers (C), scraper 35 (B), and hook (S); all substantially as described and shown.

HERBERT WILLIAM CLARKE.

JOHN NORMAN WALKER.

Witnesses:

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FRED. R. BENJAMIN.