

No. 751,403.

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F. E. NORTON.

CHISEL.

APPLICATION FILED MAY 9, 1903.

NO MODEL.

Fig. 1.

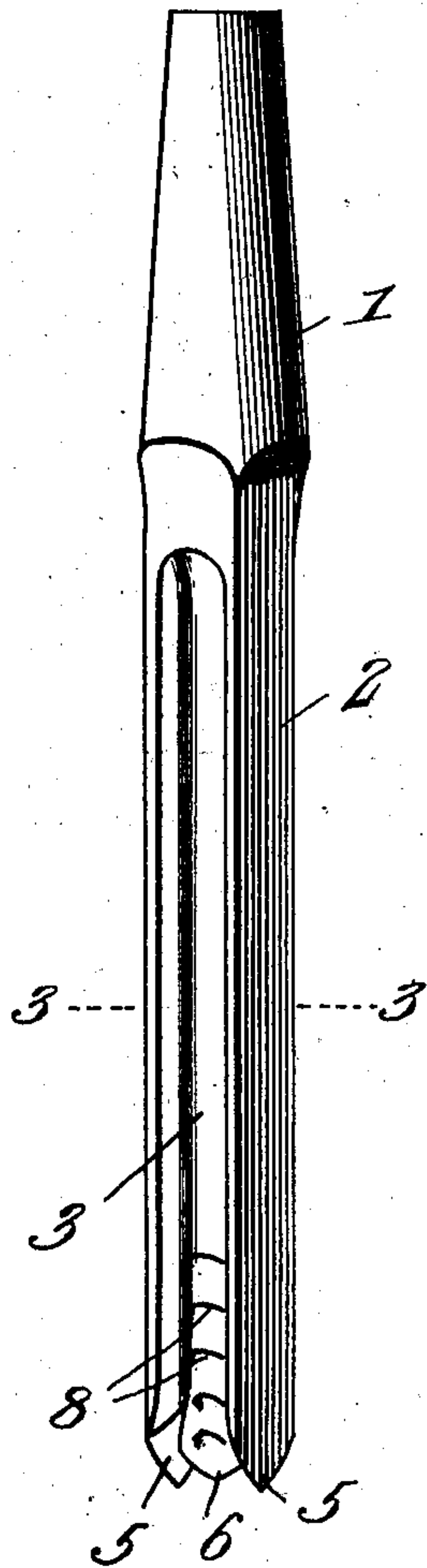


Fig. 2.

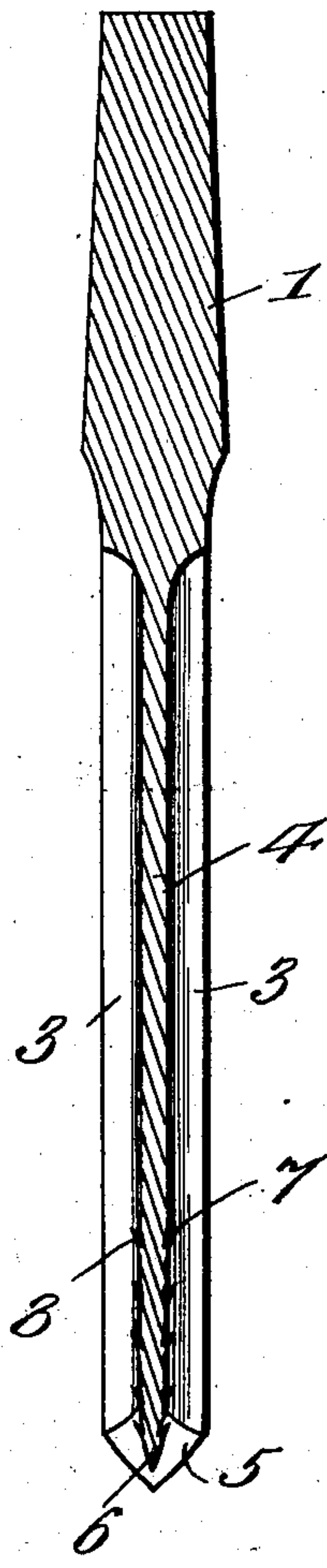
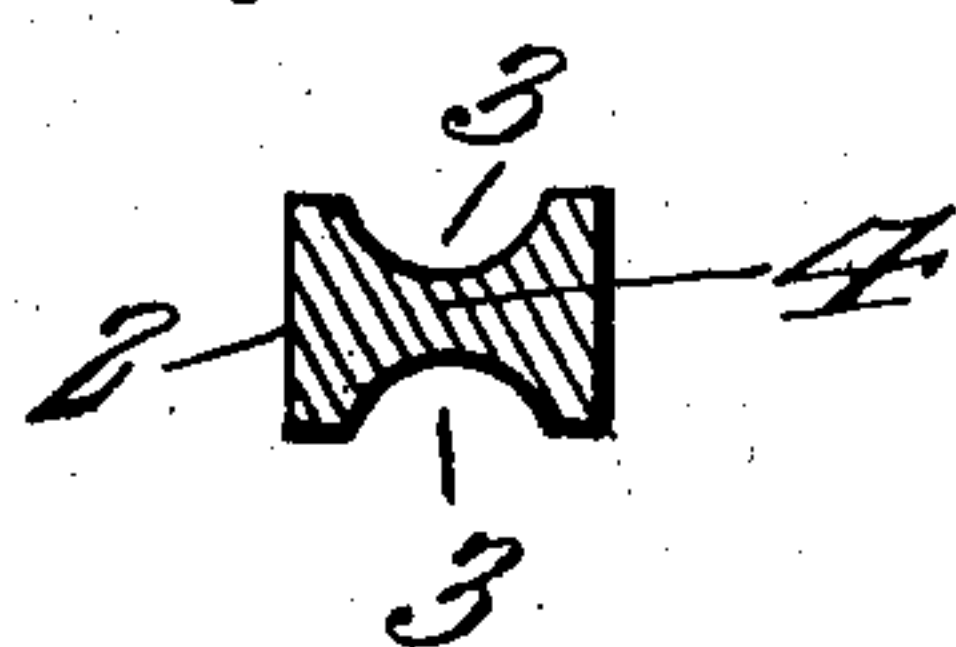


Fig. 4.



Fig. 3.



Witnesses

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CHISEL.

SPECIFICATION forming part of Letters Patent No. 751,403, dated February 2, 1904.

Application filed May 9, 1903. Serial No. 156,431. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. NORTON, a citizen of the United States, residing at Sidney, in the county of Delaware and State of New York, have invented new and useful Improvements in Chisels, of which the following is a specification.

This invention relates to chisels, and particularly to that class of chisels known as "mortising-chisels;" and the object of the same is to provide a chisel of the character set forth with means for securing the chips from the mortise through the medium of chip-catching means forming a part of the chisel.

A further object of the invention is to provide a mortising-chisel having the opposite portions of the working body thereof burred out to form therein opposite concave recesses which extend longitudinally of the same and also to provide cutting-points therefor of diamond shape, whereby the chips will not be pinched or crowded and the chisel permitted to have a rolling action which breaks the chips as they work to the center thereof, and, furthermore, permit the pointed edges to have a shear cut instead of a square blunt cut, as in ordinary mortising-chisels.

With these and other objects in view the device consists in the construction and arrangement of the several parts, which will be hereinafter more fully described and claimed.

In the drawings, Figure 1 is a perspective view of the chisel embodying the features of the invention. Fig. 2 is a vertical transverse section thereof. Fig. 3 is a horizontal section on line 3 3, Fig. 1. Fig. 4 is an elevation of the improved chisel, embodying a modification in the construction thereof.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a shank adapted to be fitted in a suitable holding means and having a working body of elongated form, which is approximately rectangular in cross-section, as shown in Fig. 3. In opposite sides of the body 2 concave recesses 3 are formed by burs or other means, said recesses extending almost full length of the body and separated by a central web 4. The ends of the body 2 have

their terminals formed with opposite downwardly-converged sharpened points 5, as clearly shown by Figs. 1 and 2, which permit the chisel to have a shearing cut. The adjacent end 6 of the web is also reduced to form a cutting edge which coöperates with the points 5.

The improved chisel is provided with means for drawing chips from the mortise, and such means consists of curved slits 7, formed in the opposite sides of the web 4, adjacent to the end 6 thereof, to release a part of the metal of the web which is struck out to provide elongated curved spurs or sharpened lips 8, which project upwardly and catch the chips as they are loosened and withdraw such chips from the mortise when the chisel is raised.

A modification of the chip-catching means is shown by Fig. 4 and consists in forming in the opposite sides of the web 4, adjacent to the free end thereof, a series of triangular spurs 9 and also constructing a concave recess 10 in the free end of the web to reduce the resistance against penetration of the free end of the chisel into the lumber in forming the mortise and also to cut smaller chips. The points 5 in this modified form of chisel are similar to those heretofore described and have a like operation.

During the operation of the chisel in connection with the lumber or device in which the mortise is being formed a rolling movement is imparted to the chisel, which facilitates the removal of the chips, and also by reason of the formation of the recesses 3 pinching or crowding of the chips against the chisel is obviated, and, on the contrary, the chips are broken and more easily removed. The chip-catching means shown facilitates the removal of the chips from the mortise every time the chisel is drawn upwardly and outwardly therefrom.

The improved mortising-chisel will be found exceptionally advantageous, and it is obvious that changes in the proportions and dimensions may be made without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new is—

1. A mortising-chisel having longitudinally-extending concave recesses in the opposite

sides thereof forming side flanges which have opposite downwardly - converged sharpened pointed ends.

- 5 2. A mortising-chisel having elongated recesses in the sides thereof forming side flanges which have lower downwardly - converging sharpened pointed ends, and chip-catching means near the free extremity of the chisel.

In testimony whereof I affix my signature in presence of witnesses.

FRANK E. NORTON.

Witnesses:

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