

W. W. WHITE.  
METHOD OF PROTECTING EMERY-WHEELS.

No. 193,306.

Patented July 17, 1877.

Fig. 1.

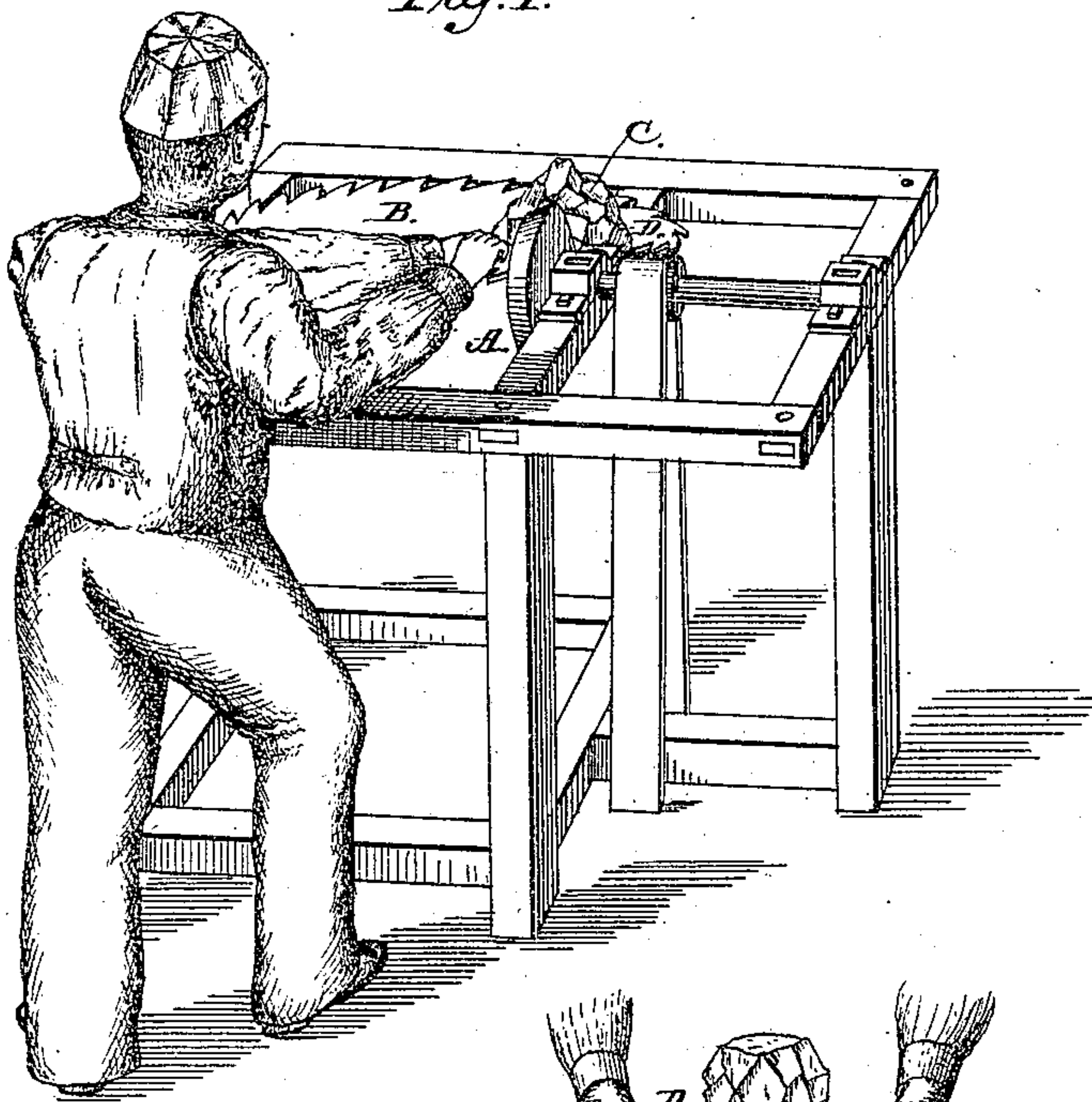
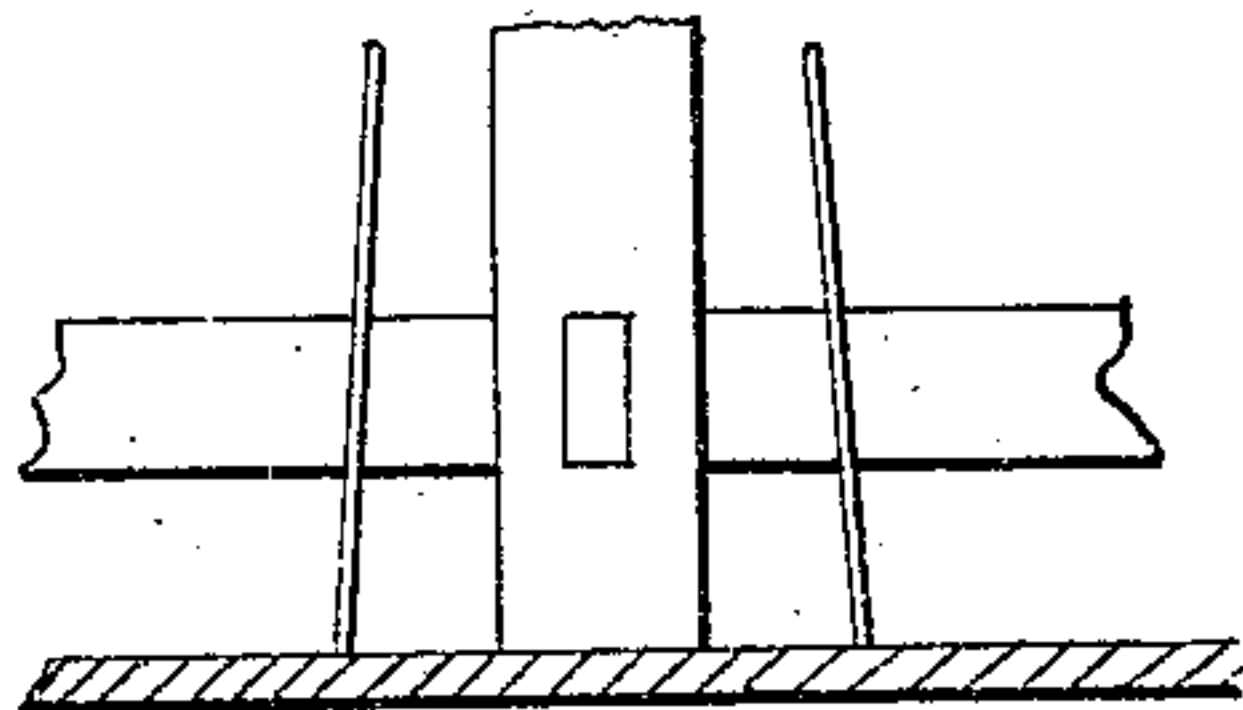
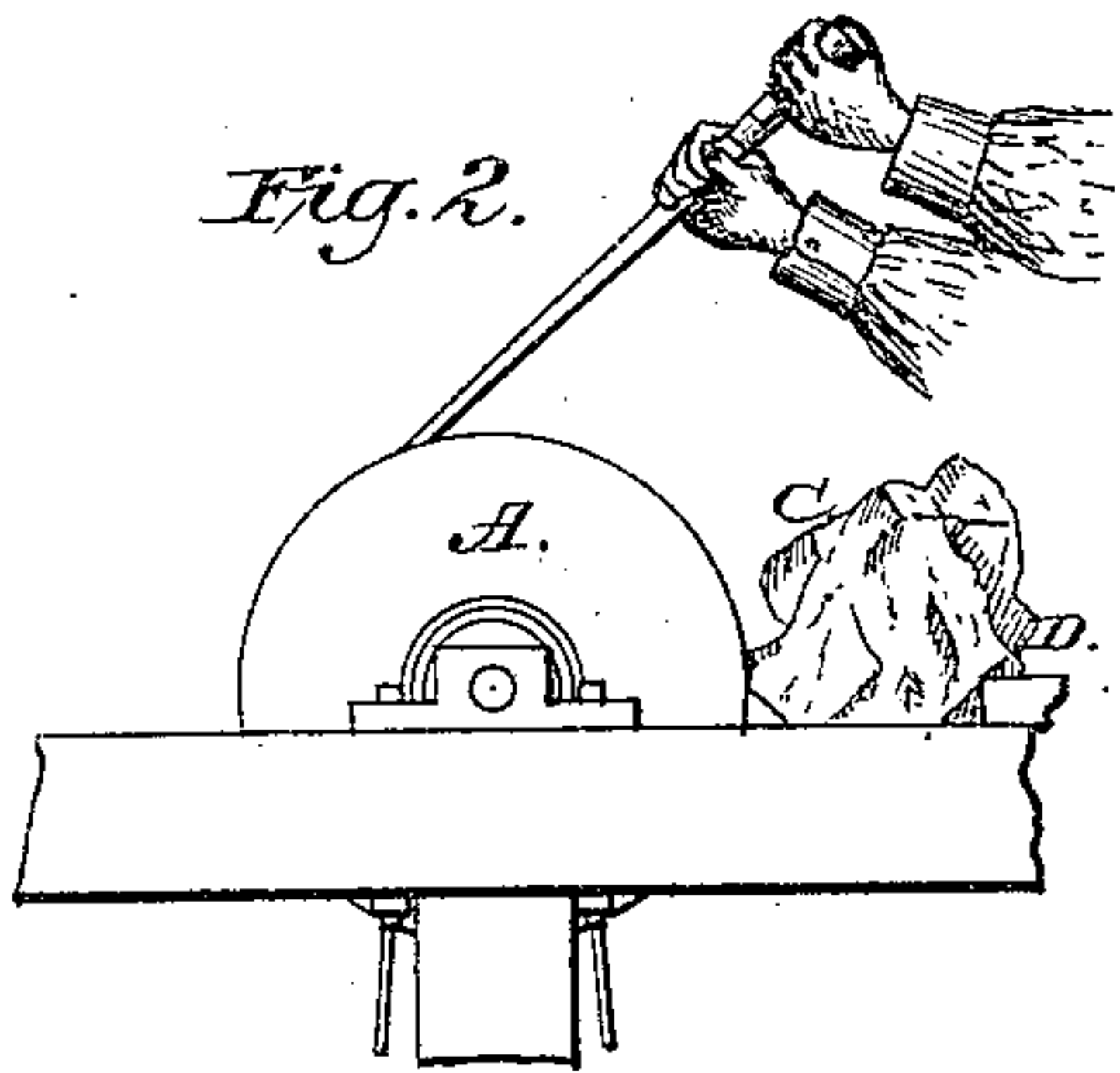


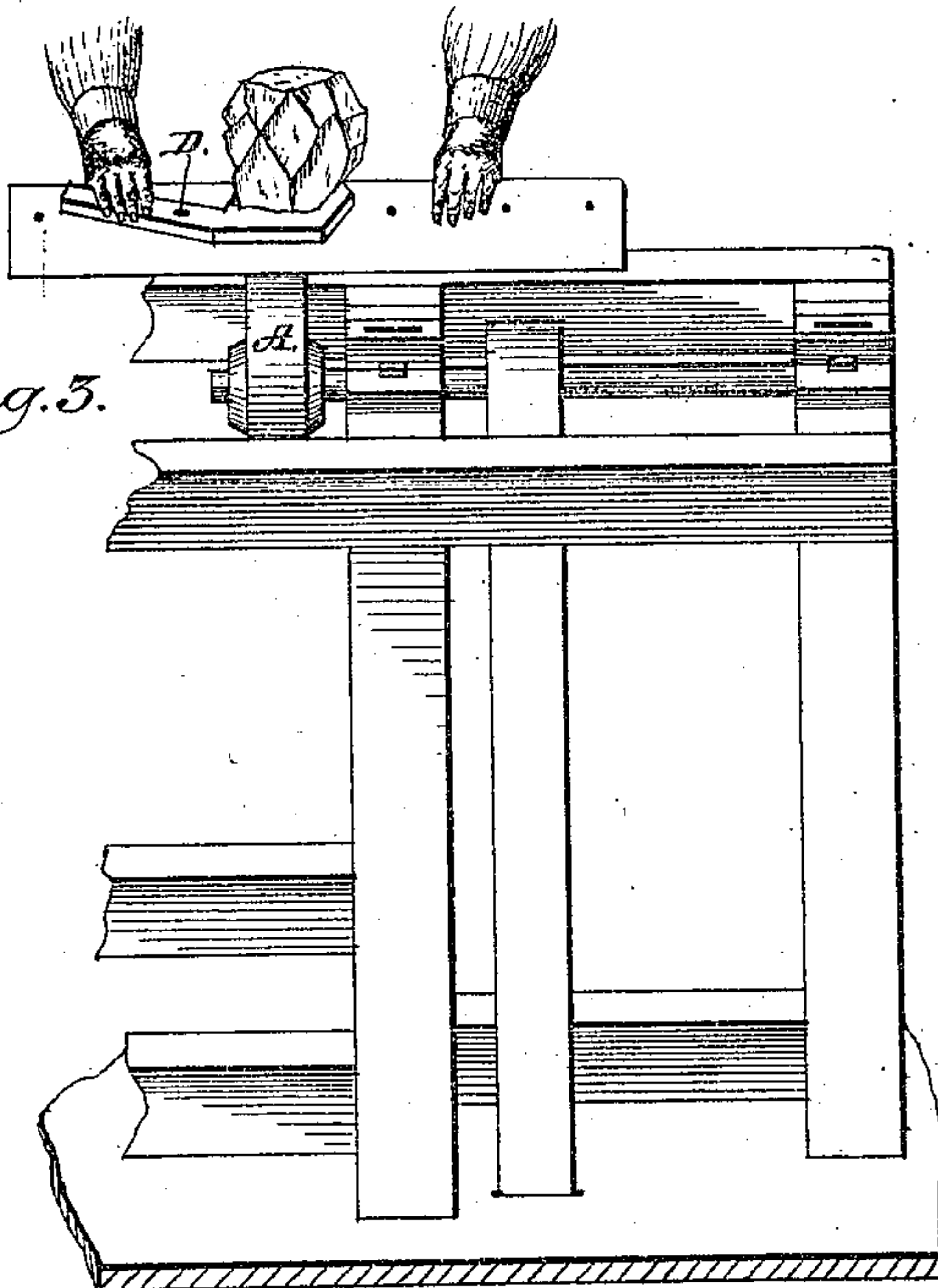
Fig. 2.



Attest:

L. Rogers.  
C. M. Davis

Fig. 3.



Inventor:

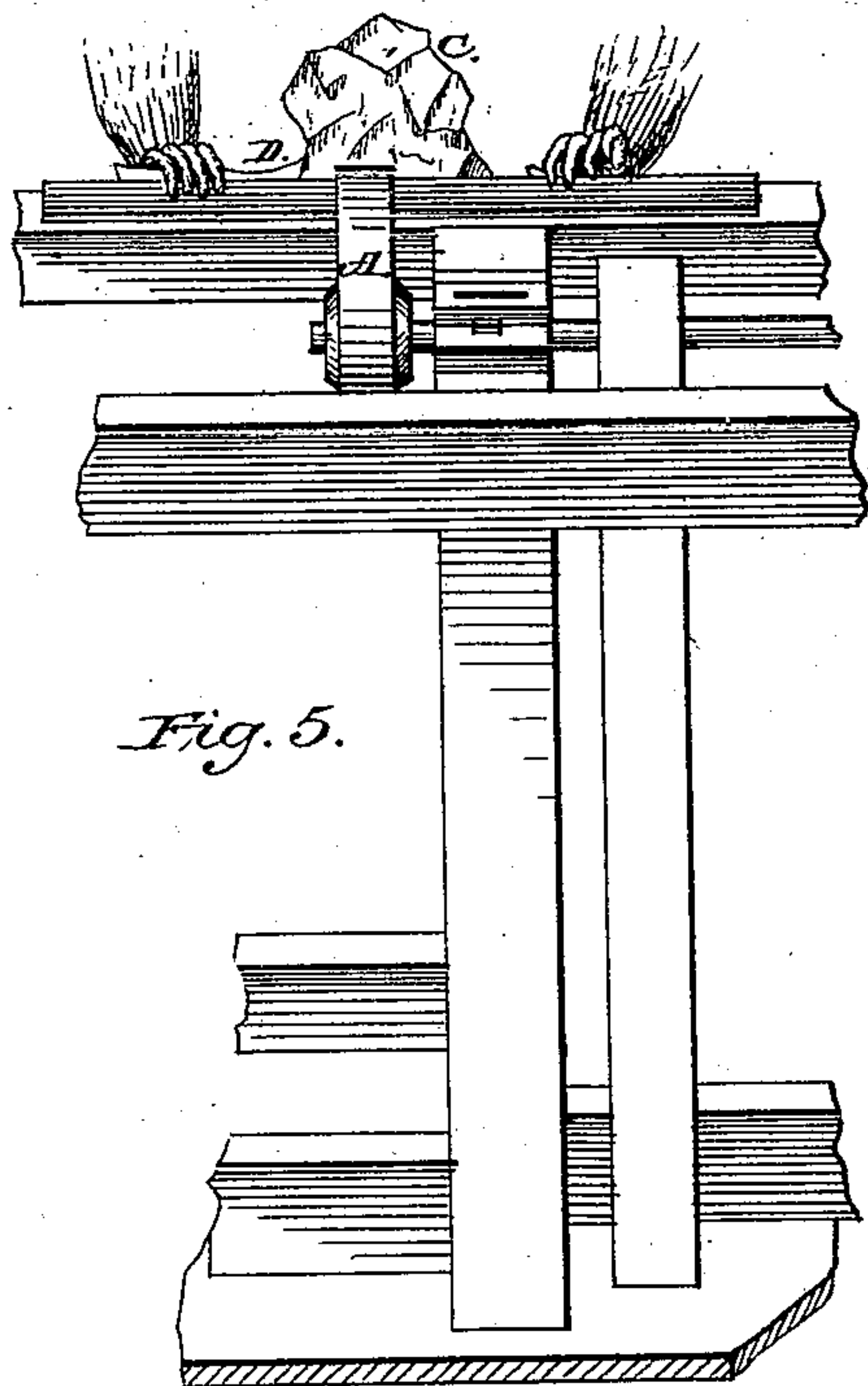
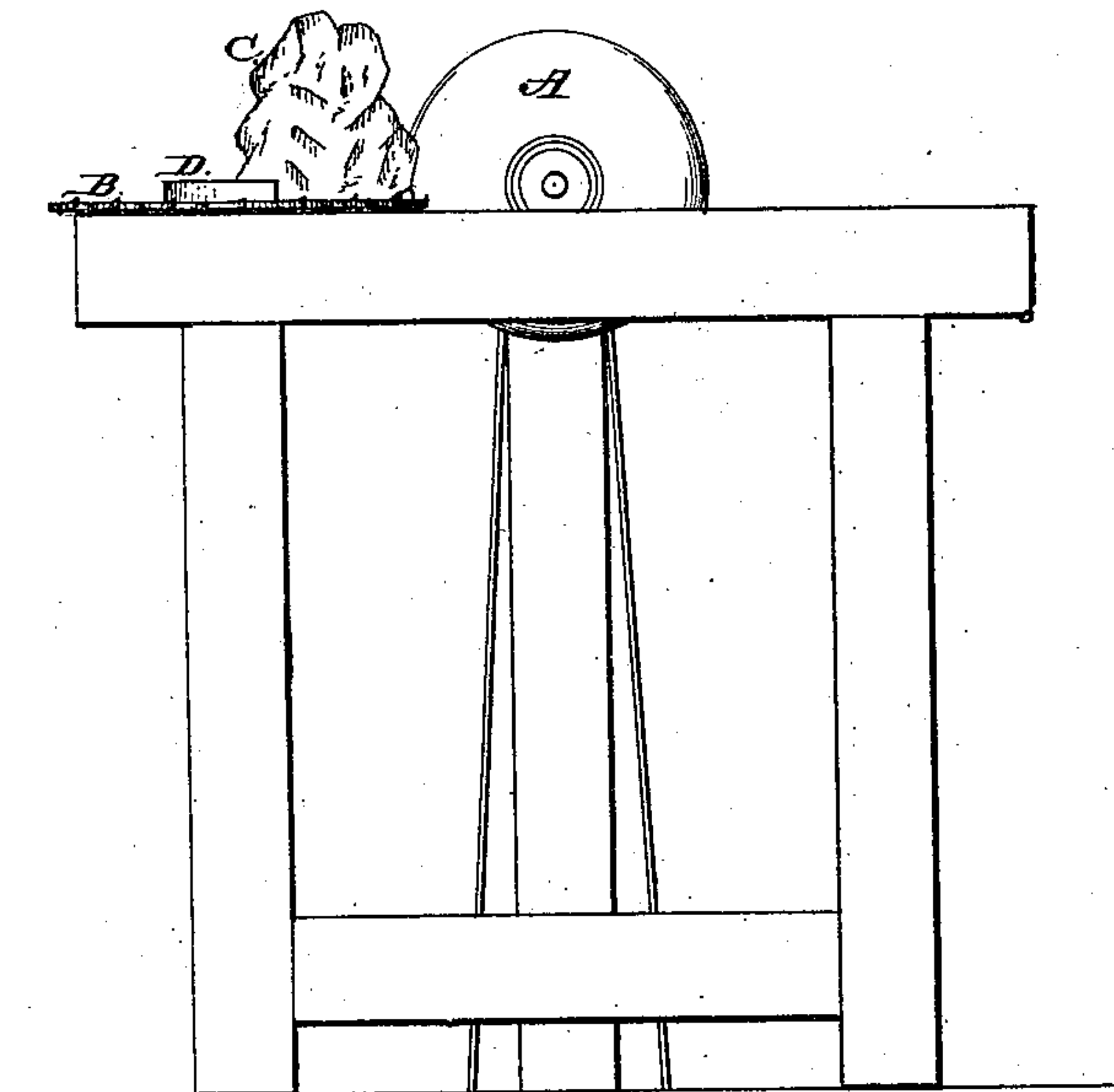
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*Fig. 4.*



*Fig. 5.*

*Attest:*

*L. Rogers,  
C. M. Davis.*

*Inventor:*

*W. W. White*

# UNITED STATES PATENT OFFICE.

WILLIAM W. WHITE, OF MCKEAN COUNTY, PENNSYLVANIA.

## IMPROVEMENT IN METHODS OF PROTECTING EMERY-WHEELS.

Specification forming part of Letters Patent No. **193,306**, dated July 17, 1877; application filed May 28, 1877.

*To all whom it may concern:*

Be it known that I, WILLIAM W. WHITE, in the county of McKean and State of Pennsylvania, have invented a new and improved mode of preventing emery-wheels and emery-grindstones from glazing, breaking, or bursting while gumming, grinding, or cutting away the steel; and I do hereby declare that the following is a full and exact description thereof.

My invention consists in applying ice to the emery-wheels or emery-grinders while being used to grind or cut away the steel.

One mode of application is to place the ice on the steel to be cut away and let the ice rest against the emery-stone at the same time.

My invention also consists in applying ice at one and the same time to both the wheel and the metal while the metal is being ground.

In the drawings, Figures 1 and 4 represent a mode of applying ice in the gumming of a saw. The ice rests upon the saw B and against the emery-stone A, and is held in position by the tool D in the hand of the workman, or otherwise steadied. Here the described effects are produced on both wheel and saw.

Fig. 2 represents the ice C resting against the stone A while a chisel is being ground, the ice affording its coolness and its moisture

directly to the stone alone with the effect above described.

Figs. 3 and 5 show a mode of applying ice in the grinding of a planer-knife, where the ice C rests upon the knife, and not against the stone, and is held in position by the tool D. The ice may also be so placed as to be held in position by its own gravity.

My discovery and its mode of application may be more fully understood by reference to the accompanying drawings.

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

1. The method of preventing emery-wheels from glazing, breaking, or bursting while being used, which consists in applying ice to the wheel while it is in operation, as set forth.

2. The method of preventing emery-wheels from glazing, breaking, or bursting while being used, and of preventing the metal being ground from changing in quality, as described, which consists in applying ice to the wheel and to the metal being ground, as set forth.

WILLIAM W. WHITE.

Witnesses:

L. ROGERS,  
W. S. OVIATT.