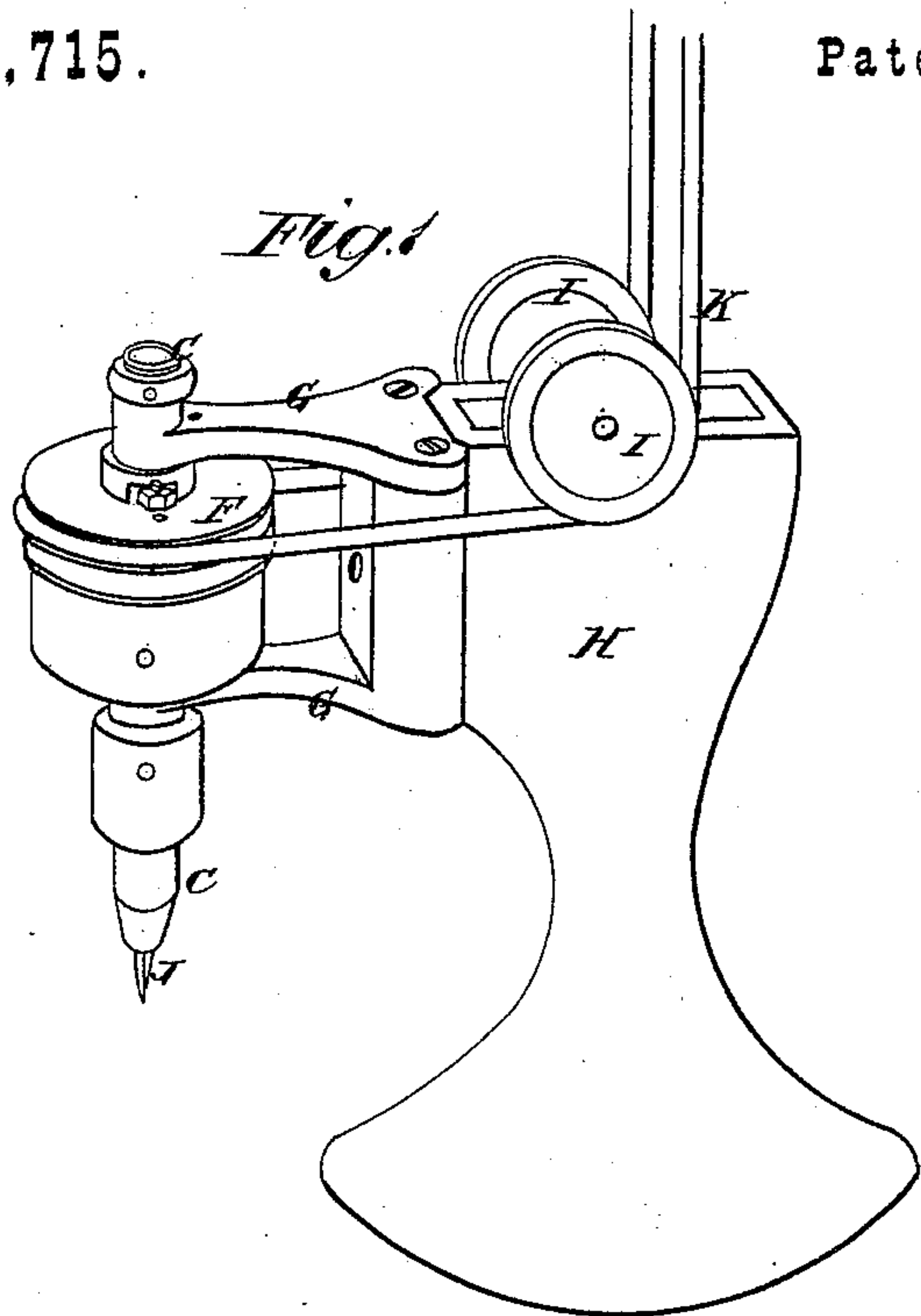


R. R. ATCHISON.

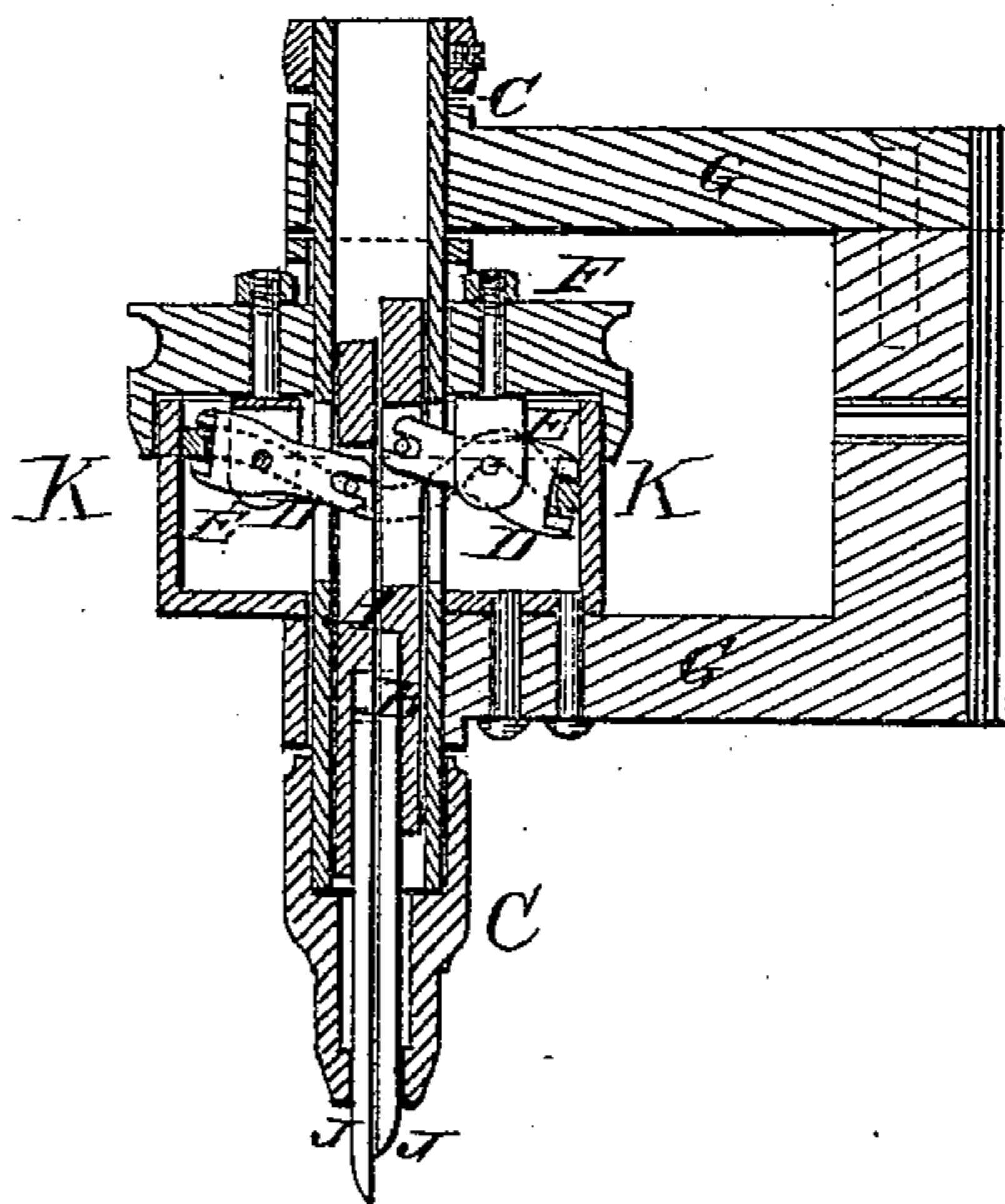
ENGRAVING AND CHASING MACHINE.

No. 174,715.

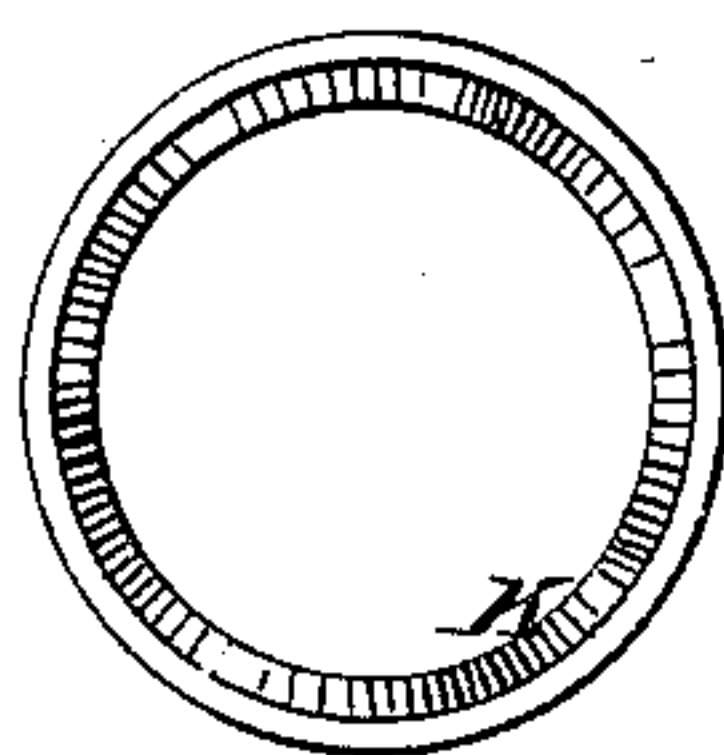
Patented March 14, 1876.



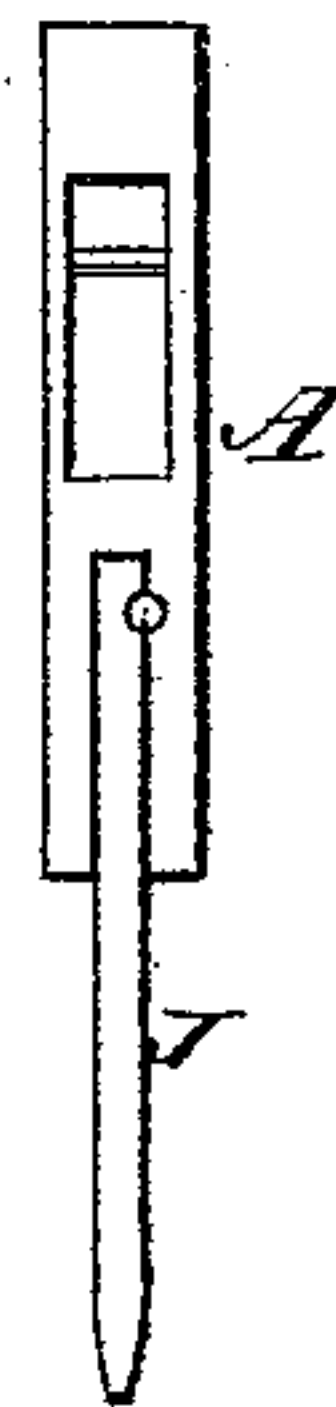
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

*Francis M. Andle,*  
*John Goethals*

INVENTOR:

*R. R. Atchison*

BY

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# UNITED STATES PATENT OFFICE.

ROBERT R. ATCHISON, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN ENGRAVING AND CHASING MACHINES.

Specification forming part of Letters Patent No. **174,715**, dated March 14, 1876; application filed February 21, 1876.

*To all whom it may concern :*

Be it known that I, ROBERT RALSTON ATCHISON, of the city of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Engraving and Chasing Machine, of which the following is a specification.

My invention consists of a couple of tool-stocks, each carrying an engraving, chasing, or other tool in a hollow revolving mandrel, and made to reciprocate, at the same time alternately with each other, three or four times with each revolution for making engraved or chased ground-work on gold or plated jewelry, silver, silver-plated, or washed ware.

Figure 1 is a perspective view of my improved machine. Fig. 2 is a sectional elevation. Fig. 3 is a plan view of the cam-ring for making the reciprocating movements of the tool-stocks, and Fig. 4 is a side elevation of one of the tool-stocks with a tool in it.

A and B represent a couple of tool-stocks, arranged side by side in the hollow revolving-mandrel C, so as to slide up and down freely at the same time that they are turned around by the mandrel; D, levers suspended in

hangers E from the pulley F, which turns the mandrel, said levers being connected at one end with one of the tool-stocks and at the other with the stationary cam-ring K, so that they cause the tool-stocks to slide up and down while being revolved by the mandrel C.

The mandrel is mounted in the bearing G, which is attached to a stand, H, and has pulleys I, for receiving the belt K from above and guiding it around the horizontal pulley F.

J represents the engraving-tools, which are fitted in the stocks so as to be taken out readily for changing to use tools with different-shaped points for different work.

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

The combination of stationary cam-ring K, levers D, pulley F, hollow mandrel C, and the tool-stocks A B, substantially in the manner and for the purpose described.

ROBERT R. ATCHISON.

Witnesses :

AUGUSTUS DOYLE,  
WILLIAM B. WALKER.