

A. C. NORTON.

Clamp for Grinding Watch-Crystals.

No. 163,683.

Patented May 25, 1875.

Fig. 1.

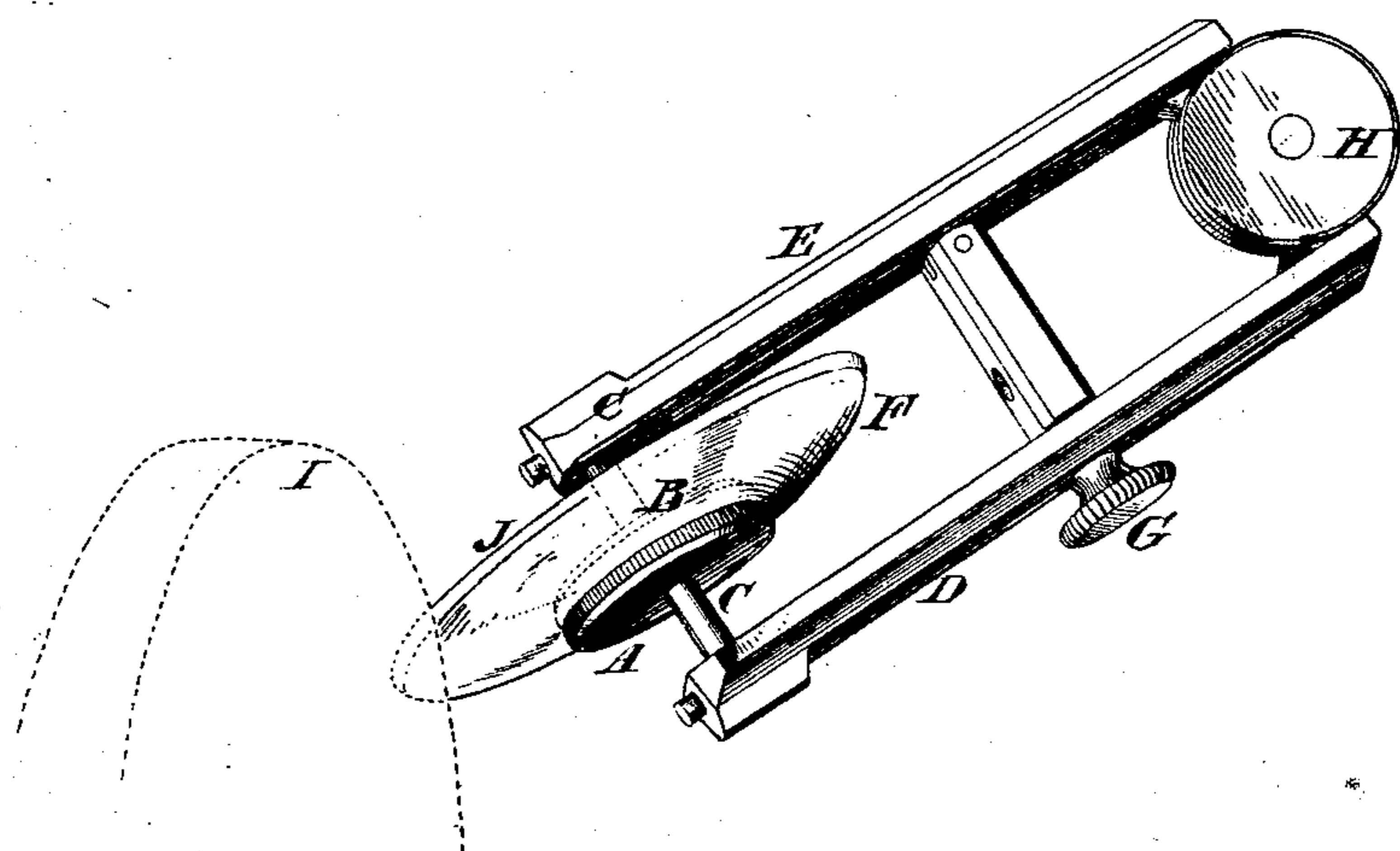
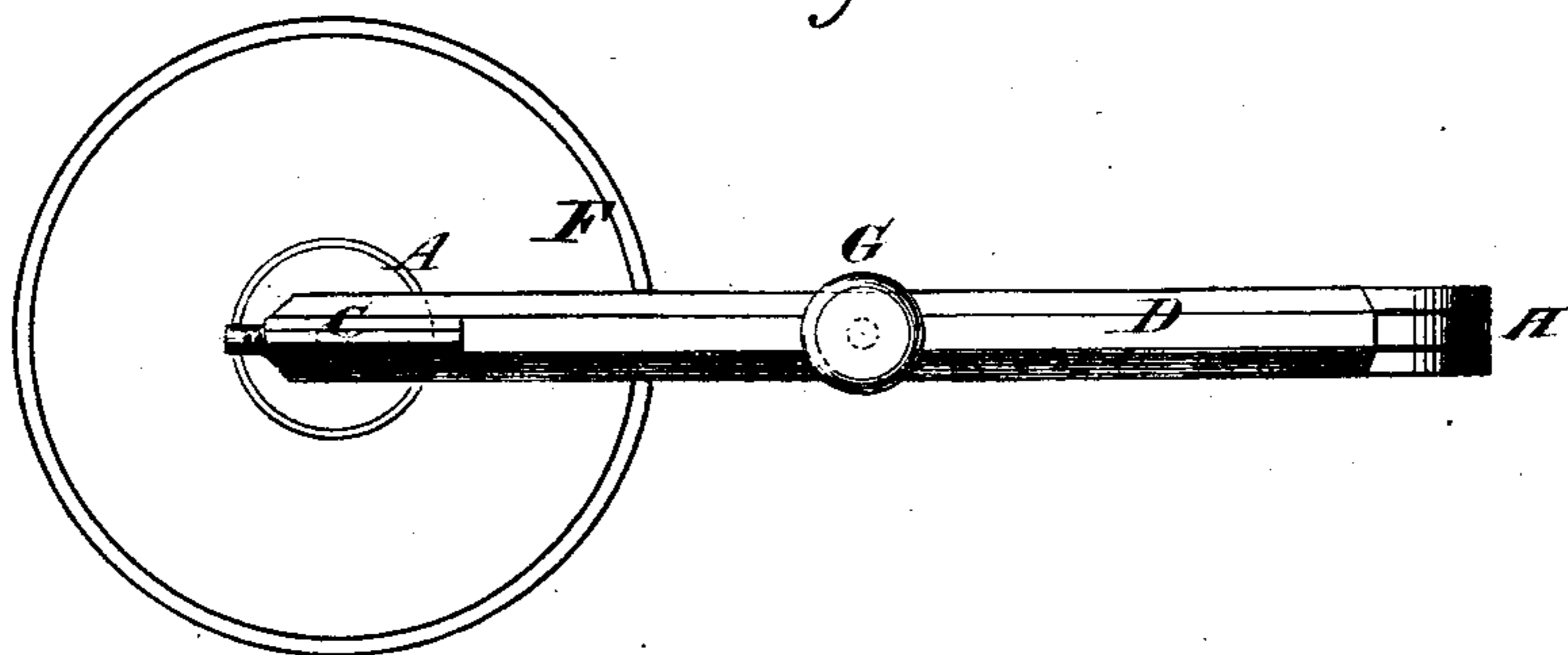


Fig. 2.



WITNESSES:

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ARTHUR C. NORTON, OF MONONA, IOWA.

IMPROVEMENT IN CLAMPS FOR GRINDING WATCH-CRYSTALS.

Specification forming part of Letters Patent No. **163,683**, dated May 25, 1875; application filed March 29, 1875.

To all whom it may concern:

Be it known that I, ARTHUR C. NORTON, of Monona, in the county of Clayton and State of Iowa, have invented a new and Improved Crystal-Grinder, of which the following is a specification:

My invention consists of a pair of rubber-faced clamping-disks, arranged in a pair of jointed clamping-jaws, having a clamping-screw for fastening them to receive and hold between them a watch-crystal, and revolve with it, when the edge of a crystal is presented to the face of a grindstone, so that the crystal will be ground on the edge suitably for fitting in the rim of a watch-case.

Figure 1 is a perspective view of my improved crystal-grinder, with a crystal between the clamps and presented against the face of a grindstone, and Fig. 2 is a side elevation of the grinder.

Similar letters of reference indicate corresponding parts.

A and B represent the clamping-disks, with

elastic faces, and arranged on independent axles C in the arms D E of the clamp, so as to receive the crystal F between them, as shown. G is the clamp-screw, and H the joint of the arms of the clamp. The crystal is secured between the clamping-disks, and the edge is then presented to the face of the grindstone L, at such an angle as to give the proper bevel to the edge J of the crystal, and to turn it and cause it to be ground alike all around the edge.

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

The revolving elastic-faced disks A and B on independent axles C, in combination with jointed clamping-arms D E and a clamp-screw, G, substantially as specified.

ARTHUR C. NORTON.

Witnesses:

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