

(No Model.)

2 Sheets—Sheet 1.

T. MOORE.

APPARATUS FOR POINTING PENCILS.

No. 302,154.

Patented July 15, 1884.

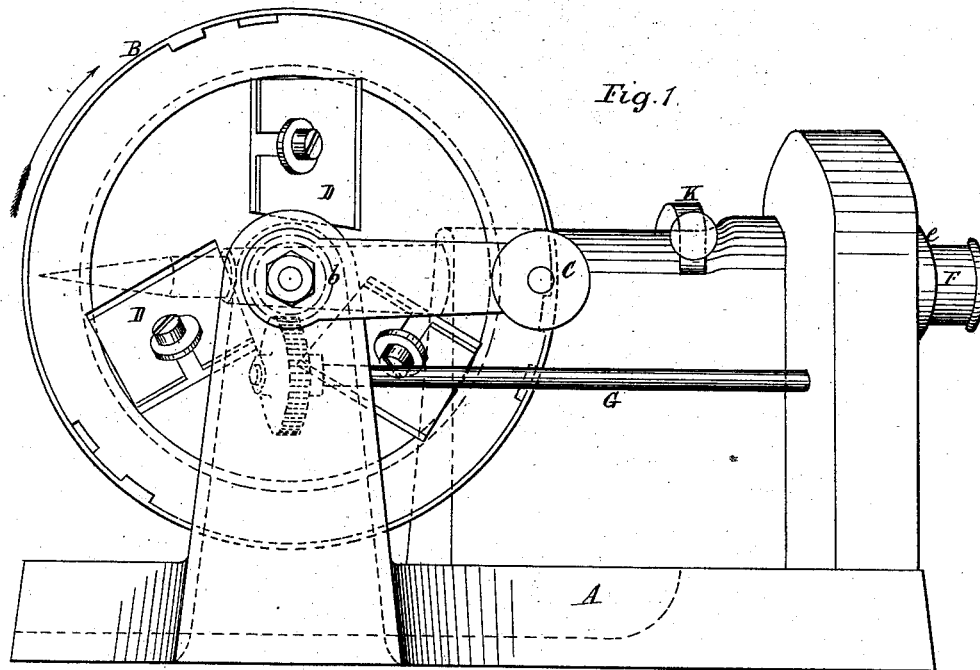
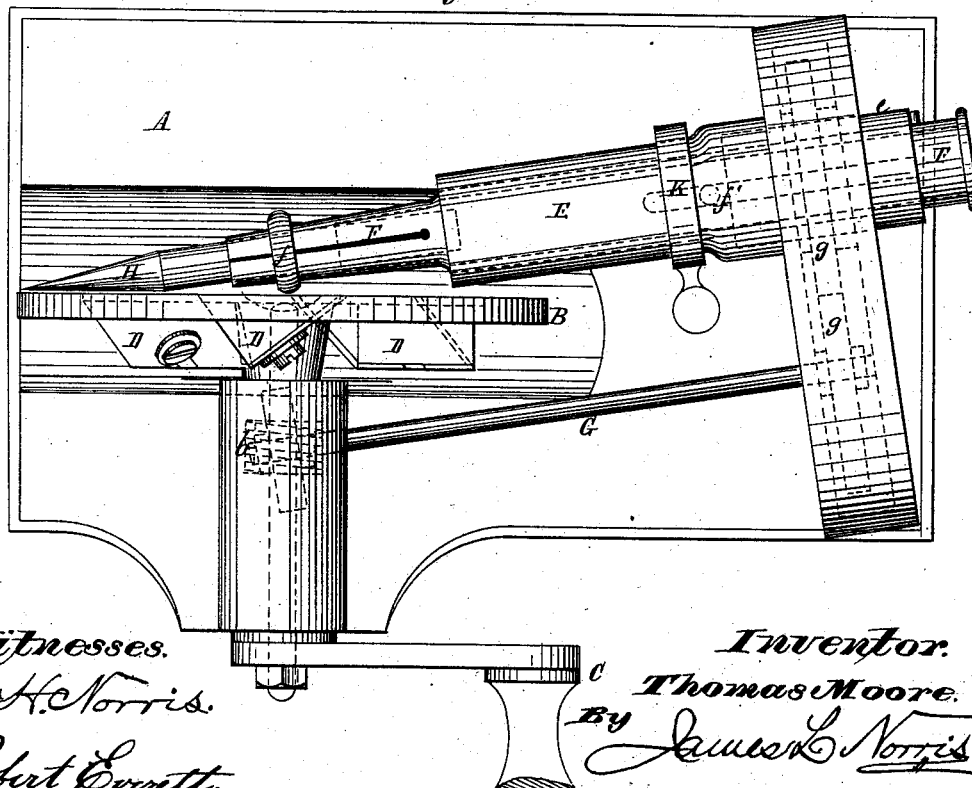


Fig. 1.

Fig. 2.



Witnesses.  
A. H. Norris.  
Robert Everett.

Inventor.  
Thomas Moore.  
By James L. Norris.  
Atty

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Fig. 3.

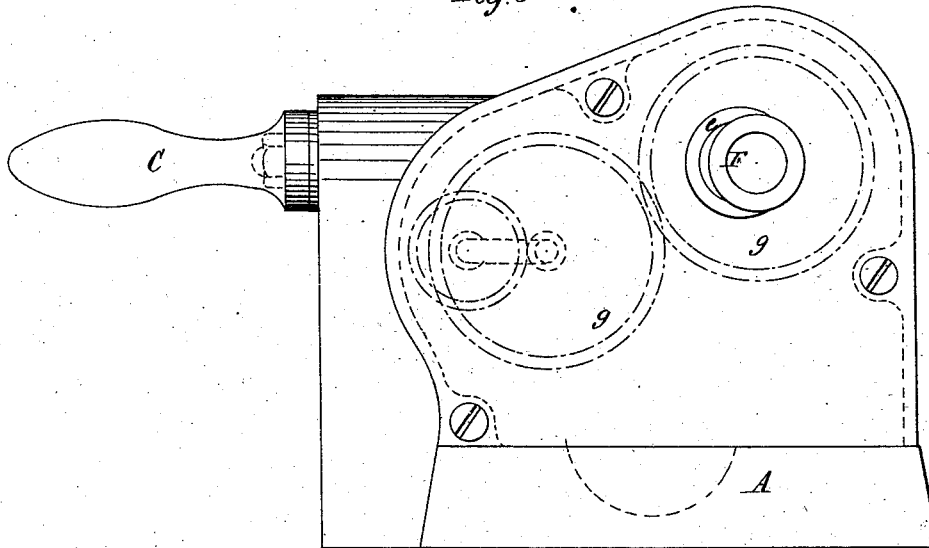


Fig. 6.

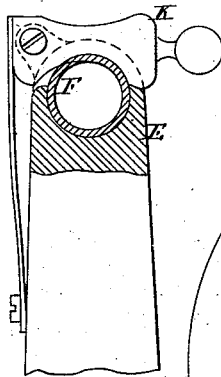
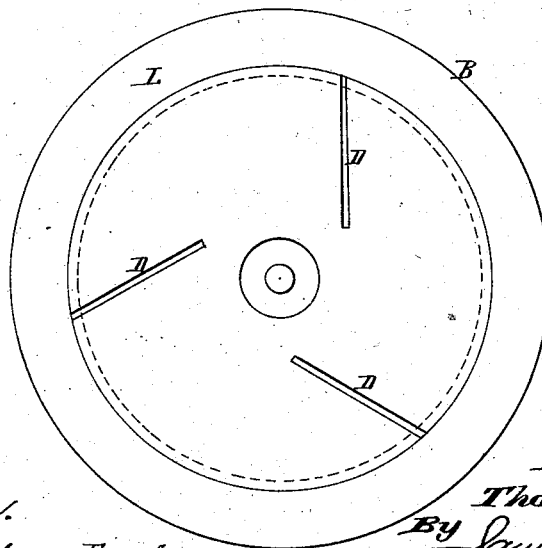


Fig. 4.

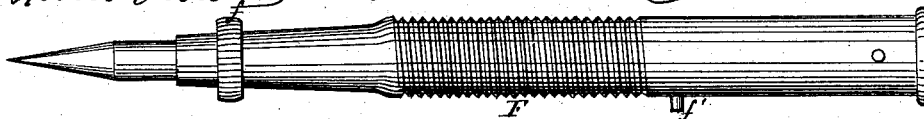


Witnesses,

Asst. Norris.

Robert Everett.

Fig. 5.



Inventor.

Thomas Moore.

By James L. Norris, Atty.

# UNITED STATES PATENT OFFICE.

THOMAS MOORE, OF ISLINGTON, COUNTY OF MIDDLESEX, ENGLAND.

## APPARATUS FOR POINTING PENCILS.

SPECIFICATION forming part of Letters Patent No. 302,154, dated July 15, 1884.

Application filed May 7, 1884. (No model.) Patented in England January 30, 1884, No. 2,420.

### *To all whom it may concern:*

Be it known that I, THOMAS MOORE, a citizen of England, residing at Islington, in the county of Middlesex, England, have invented a new and useful Apparatus for Pointing Pencils, (for which I have obtained provisional protection in Great Britain, No. 2,420, dated January 30, 1884,) of which the following is a specification.

My invention relates to apparatus for pointing pencils, which I will describe, referring to the accompanying drawings.

Figure 1 is a side view, Fig. 2 is a plan, and Fig. 3 is an end view, of the whole apparatus. Fig. 4 is a front view of the cutting-disk. Fig. 5 is a side view of the holding-tube, and Fig. 6 is a part section showing the catch-nut for feeding.

On a frame, A, I mount in bearings the axis of a disk, B, which is turned in the direction of the arrow by a handle, C. In the disk are fixed obliquely three or more plane irons, D, adjustable, so that they can be set with their cutting-edges projecting a little beyond the face of the disk B. Within a bearing, E, is fitted to revolve a tubular socket, *e*, into which can be inserted a tube, F, this tube having on it a stud, *f'*, which enters a slot of the socket *e*. On the outside of the tube F is cut a screw-thread, and the front end of the tube is split up for some distance, and provided with a ring, *f*, so that a pencil inserted within the tube F can be clamped therein by pushing the ring *f* along the taper part of the tube F. The axis of the tube F, when it is inserted into the socket *e*, is inclined to the face of the disk B at an angle which is half that desired for the conical point of the pencil. On the axis of the disk B is a worm, *b*, gearing with a worm-wheel on an axis, G, which, by means of toothed wheels *g*, is geared to the tubular socket *e*, so that when the disk B is caused to revolve the socket *e* is also caused to revolve more slowly, turning with it the tube F and the pencil H, which it holds.

To the bearing E is hinged, and provided with a knife-blade spring, a catch, K, which has on its under side part screw-threads fitting the screw on the tube F, so that when this catch is turned down, as shown in Fig. 6, the tube F, while it revolves, is caused slowly to advance.

On the face of the disk B, outside the plane-

irons D, is an annulus, L, of a grinding material, which may be a file-cut surface; or it may be a ring of emery or other grinding material fixed to the disk.

The action of the apparatus is as follows: A pencil, H, being introduced into the tube F, and clamped therein by means of the ring *f*, the tube F, containing the pencil, is introduced through the socket *e*, so that the end of the pencil projects toward the disk B. The catch K being then turned down, so that its screw-threads engage with those of the tube F, the disk B is turned by means of the handle C, and by means of the gearing the socket *e*, tube F, and pencil H are caused to turn slowly, the tube and pencil also being caused to advance by the engagement of the screw-threads at K. The plane-irons D, in revolving, slice off portions of the wood at the end of the pencil, giving it its conical form, while the grinding-surface L of the disk points the black-lead core of the pencil. When the pencil is sufficiently pointed, the catch K is raised, the tube F is withdrawn, and the pencil is released from it.

Having thus described the nature of my invention and the best means I know of carrying it out in practice, I claim—

1. An apparatus for pointing pencils, consisting of a revolving disk carrying plane irons and having a grinding annulus, in combination with a screwed tube holding the pencil mounted in a bearing, with its axis inclined to the plane of the disk, and connected to the disk by gearing, constructed and operating substantially as described.

2. In apparatus for pointing pencils, the disk B, carrying plane-irons D, and having a grinding-annulus, L.

3. In apparatus for pointing pencils, the screwed tube F, split and coned, with a clamping-ring, *f*, in combination with a tubular socket, *e*, and spring catch-nut K.

4. In apparatus for pointing pencils, the combination of the disk B, the axis and gearing G and *g*, and the tubular socket *e*.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 18th day of April, A. D. 1884.

THOMAS MOORE.

Witnesses:

OLIVER IMRAY,  
JNO. P. M. MILLARD.