J. HOLLAND.

Writing Pens.

No. 135,118.

Patented Jan. 21, 1873.

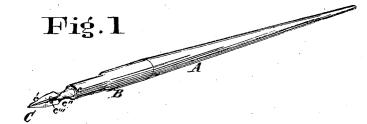


Fig. 2



Fig. 3



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Attorney **X**NVentor

UNITED STATES PATENT OFFICE.

JOHN HOLLAND, OF CINCINNATI, OHIO.

IMPROVEMENT IN WRITING-PENS.

Specification forming part of Letters Patent No. 135,118, dated January 21, 1873.

To all whom it may concern:

Be it known that I, JOHN HOLLAND, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Improvement in Writing-Pens, of which the following is a specification:

Nature and Objects of Invention.

My invention relates to the construction of inelastic pens or pens without nibs; and consists of a "point" of hardened steel detachable from the holder for repairs, provided with longitudinal grooves for the lodgment and conduction of the ink, and transverse perforations to serve as reservoirs for the ink, the object of my invention being to render the pen adapted for repairs or replacement at the working-point, and provide for a large charge of ink at each dipping of the pen.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of my improved marking or writing pen. Fig. 2 is a longitudinal section of the same. Fig. 3 is a cross-section of the point.

General Description.

A is the handle of the holder; and B, the socket of the same. The socket is permanently attached to the handle in any preferred way. C is the detachable point. It is made of steel hardened, or of iron case-hardened, so that when the material is soft the point can be accurately and conveniently shaped, and when

hardened will not wear away rapidly. It is snugly fitted to the socket B so that it can be detached therefrom to renew or repair the point, the point having a slight collar, e, to stop against the end of the holder for correct adjustment. The point is star-like in cross-section, as shown in Fig. 3, so that grooves e' are formed for the occupancy and conduction of the ink. A concentric groove, e'', is formed in the shank of the point, so that in the formation of the grooves relief is afforded for the clearance of the tool which forms the grooves. Holes e'' are cut across the point, in the manner shown, for the purpose of affording space for the lodgment of ink to keep up the supply, and thus enable the pen to run a long time without refilling.

My improved pen is specially designed for a marking-pen for linen, &c., but may be satisfactorily used as an ordinary writing-pen by some writers.

Claim.

The grooved and perforated detachable metallic point C c' c''', substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

JOHN HOLLAND

Witnesses:

FRANK MILLWARD, J. L. WARTMANN.