

(No Model.)

H. HÖLTZEL.

DRAWING PEN AND INK RESERVOIR.

No. 509,905.

Patented Dec. 5, 1893.

FIG. I.

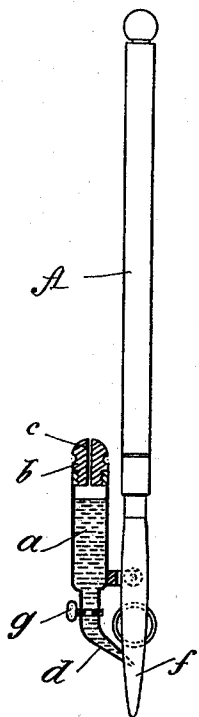


FIG. II.

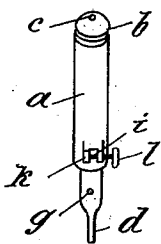


FIG. III.

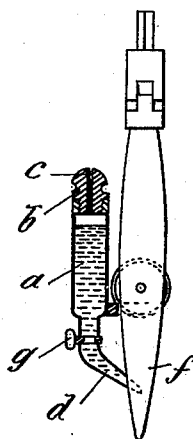
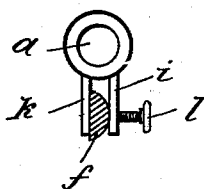


FIG. IV.



Attest
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HEINRICH HÖLTZEL, OF ESSLINGEN, GERMANY.

DRAWING-PEN AND INK-RESERVOIR.

SPECIFICATION forming part of Letters Patent No. 509,905, dated December 5, 1893.

Application filed February 3, 1893. Serial No. 460,886. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH HÖLTZEL, a subject of the King of Württemberg, residing at Esslingen, in the Kingdom of Württemberg and German Empire, have invented certain new and useful Improvements in a Combined Drawing-Pen and India-Ink Reservoir, of which the following is a specification.

This invention has for its object to combine with an ordinary drawing pen, a reservoir for holding india ink designed to save time in filling the pen and give a continuous supply, and in order that my said invention may be properly understood, I have hereunto appended an explanatory sheet of drawings, wherein—

Figure I, is a back view of a drawing pen, in which the ink reservoir is shown in section. Fig. II, is a side view of the ink reservoir. Fig. III, is a view of a compass pen, with the ink reservoir attached. Fig. IV, shows means for attaching the reservoir to the pen.

Referring to the drawings, whereon the same reference letters, wherever repeated, indicate similar or like parts:—A, is a drawing pen handle, which has attached the usual metal pen blades *f*, at its lower end. *a*, is the ink reservoir which is preferably made cylindrical in shape and is closed at top by a small screw plug *b*. As the ink in the reservoir sinks, air is admitted through a channel *c*, in the plug. The lower end of the reservoir tapers away into or has fitted to it a bent tubular delivery spout *d*, which is or may be square in cross section. The lower end of the spout is carried into the space between the two parts of the pen. A small cock *g*, or other regulating device is fitted on the spout *d*, for the purpose of regulating the outflow of the ink. When the

ink in the pen has been used a further supply can be turned on by means of the cock *g*, or the ink may be allowed to flow continuously by keeping the cock slightly open.

The reservoir is attached to the pen by means of lugs *i*, *k*, which are pushed on the pen in such a manner as to grip one of the pen blades *f*. (See Fig. IV.) On the lug *i* is a small pinching screw *l*. By turning the screw *l*, the lugs are clamped to the pen and the reservoir held firmly in place.

By loosening the screw *l*, the reservoir can be shifted up and down the pen blade to any desired height and it can then be held in place by again tightening up the screw.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In combination with a drawing pen, an independent reservoir having a curved lower end, a valve in said lower end, means for clamping the reservoir to one of the blades of the pen, and a removable cap provided with an air inlet in the upper end of the reservoir, substantially as described.

2. In combination with a drawing pen, of an independent reservoir having a tapering nozzle extending between the blades, lugs *i* adapted to embrace one of the pen blades and a set screw for clamping the same in place, substantially as described.

In witness whereof I have hereunto set my hand in presence of witnesses.

HEINRICH HÖLTZEL.

Witnesses:

HEINRICH KITZELE,

POL. COUO.

GOTTLOB RAUSCHNABEL.