No. 759,920. PATENTED MAY 17, 1904.

E. G. RUEHLE.

DOTTING PEN.

APPLICATION FILED SEPT. 8, 1903.

NO MODEL.

Fig. 1.

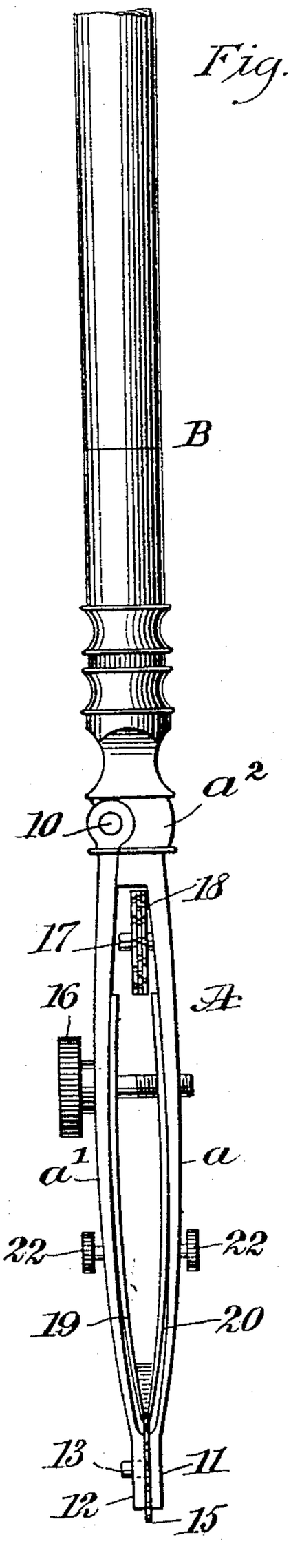


Fig. 2.

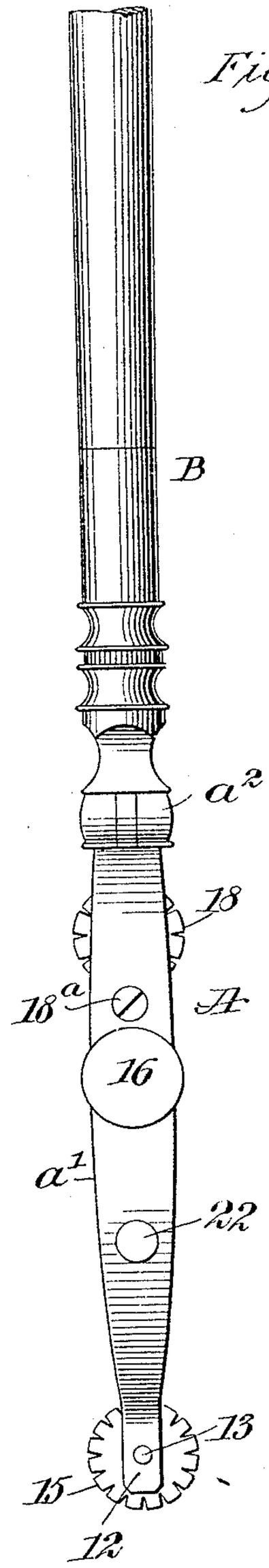
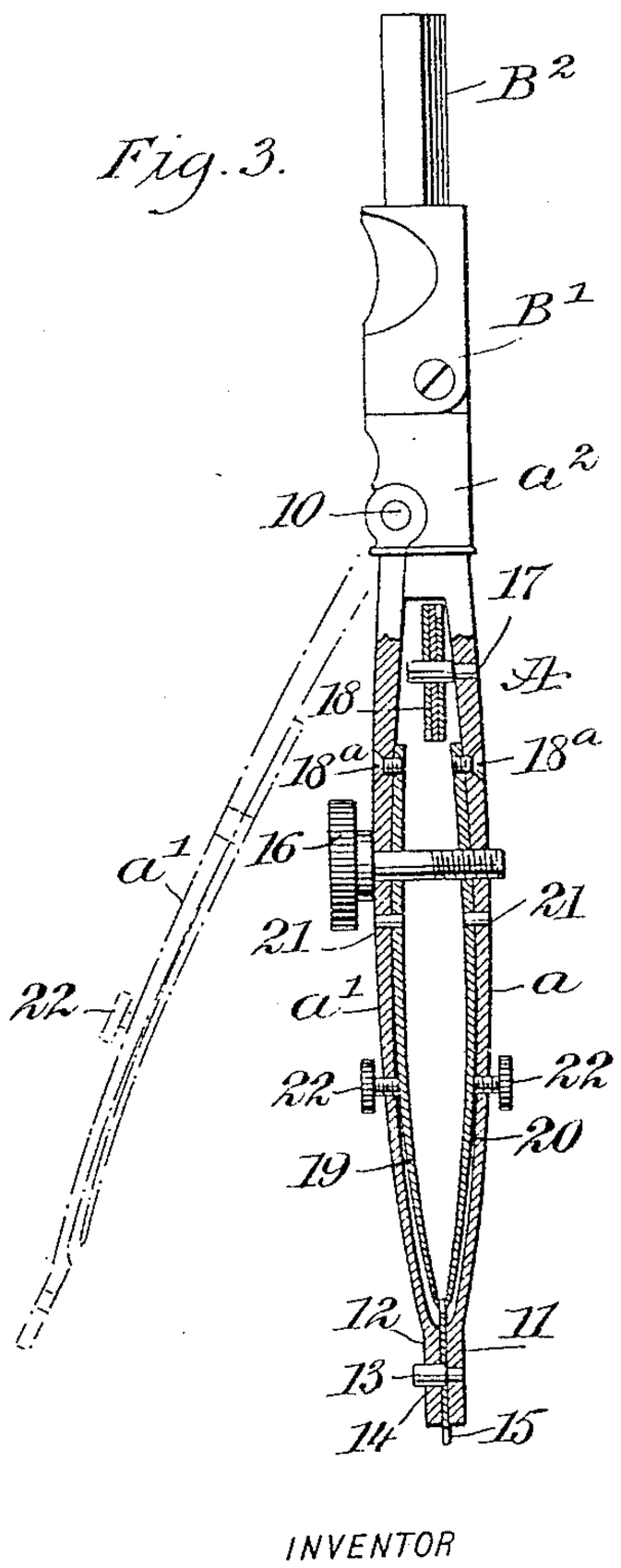


Fig. 3.



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No. 759,920. BEST AVAILABLE COP Patented May 17, 1904.

UNITED STATES PATENT OFFICE.

ERNEST G. RUEHLE, OF NEW YORK, N. Y.

DOTTING-PEN.

SPECIFICATION forming part of Letters Patent No. 759,920, dated May 17, 1904.

Application filed September 8, 1903. Serial No. 172,290. (No model.)

To all whom it may concern:

Be it known that I, ERNEST G. RUEHLE, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Dotting-Pen, of which the following is a full, clear, and exact description.

The purpose of my invention is to provide a simple, durable, and economic dotting-pen, thoroughly effective in use and which may be conveniently and expeditiously cleaned, and so constructed that reserve dotting-wheels of various sizes may be carried in the body of the pen, and so that the dotting-wheel at the point of the pen can be readily removed to be cleaned, sharpened, and replaced.

A further purpose of the invention is to provide a feeding device for the ink, located within the body and comprising two opposing members oppositely bowed or curved secured at one end of the inner faces of the members of the body of the pen, the outer ends of the members of the feed device being free and pointed and made to more or less closely approach the periphery of the dotting-wheel and to provide each member of the feed device with means of adjustment independent of the adjustment of the body of the pen, whereby the feed device may be supplied with ink in the same manner and as conveniently as the ordinary drawing-pen, insuring a regulated, uniform, and reliable supply of ink to the dotting-wheel under all conditions of use.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the improved pen. Fig. 2 is a side elevation of the same; and Fig. 3 is a sectional front elevation of a compass-pen, illustrating in dotted lines the pivoted member of the limb in open position.

A represents the body of the pen, and B the handle which is to be employed when the pen is to be used as a regular drawing-pen; but in Fig. 3 I have illustrated the body of the pen as pivotally attached to a block B′, having a polygonal stem B^2, adapted to enter a socket in a limb of a compass. The body A consists of two oppositely bowed or curved members *a* and *a′*, both of which are connected with a head member a^2, the member *a′* being pivotally connected to the said head member, and in the ordinary form of the pen the handle B is attached to the head member a^2, and when the pen is to be used in connection with a compass the aforesaid block B′ is pivotally attached to the said head.

The lower terminal portions 11 and 12 of the body members *a* and *a′* are straight, as is shown in Figs. 1 and 3, and a pin 13 is secured to the fixed member *a* of the body, being adapted to pass freely through an aperture 14 in the pivoted or swing member *a′* when the two members are brought together in working position.

A dotting disk or wheel is adapted to turn freely on the pin 13, and between the terminal portions 11 and 12 of the aforesaid body members *a* and *a′*. These body members are adjusted to and from each other and are held in adjusted position by means of an adjusting or set screw 16, which is preferably loosely passed through the swing or pivoted member *a′*, the threaded portion of the screw entering a threaded aperture in the fixed or stationary member *a*, as is best shown in Fig. 3.

At the upper portion of the body A a second pin 17 is secured to the fixed member *a*; but this pin 17 stops short of the swing or pivoted member *a′* when the latter is closed, as is shown in Figs. 1 and 3. This auxiliary or second pin 17 is adapted to carry supplemental dotting disks or wheels 18, the said dotting disks or wheels being provided with peripheral teeth of different sizes, so as to produce different lengths of dots on the paper or surface over which the disks or wheels are to travel.

The device for feeding ink to the dotting disk or wheel in action comprises two members 19 and 20, preferably made of spring steel and oppositely bowed or curved, following practically the lines of the inner faces of the body members *a* and *a′*. The upper ends

of the members 19 and 20 of the ink-feeding device are secured to the members *a* and *a'* of the body by suitable screws 18ª, located above the adjusting-screw 16 for the body, and below the said adjusting-screw 16 guide-pins 21 are secured to the body members *a* and *a'*, passing through suitable openings in the members 19 and 20 of the ink-feeding device. The said members of the ink-feeding device are also provided with suitable apertures through which the stem of the adjusting-screw 16 of the body may freely pass. The lower ends or extremities of the members of the ink-feeding device are made to converge more or less and are adapted to normally have a position one at each side of the toothed peripheral surface of the dotting disk or wheel in action, as is shown in Figs. 1 and 3.

The ink is fed to the ink-feeding device by means of an ordinary pen or a feeder usually contained in bottles of liquid ink in the same manner as the point of an ordinary drawing-pen is fed, and the volume of ink thus placed between the members of the feed device, as is shown in Fig. 1, is constantly in engagement with the periphery of the dotting wheel or disk, so that the said dotting wheel or disk, as the pen is operated, will not make a miss.

The amount of ink to be fed to the dotting wheel or disk in action is regulated through the medium of regulating or adjusting screws 22, one of which is provided for each member or jaw 19 and 20 of the ink-feeding device. These adjusting or regulating screws 22 are passed through threaded apertures in the body members *a* and *a'* of the pen and have engagement at their inner ends with the outer faces of the members or jaws 19 and 20 of the ink-feeding device. Thus it will be observed that the adjustment of the pen in its entirety is completely under the control of the operator and that the pivoted or swing member *a'* of the body may be carried away from the fixed member *a* whenever it is desired to clean the pen or to change the dotting disk or wheel.

This pen is perfectly adapted for the purpose intended. It is readily cleaned, and the supply of ink to the dotting disk or wheel will be constant, and ink can be supplied to the feeding device as readily as ink can be supplied to the working points of an ordinary drawing-pen.

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

1. In a dotting-pen, a body-section, a dotting-wheel, means for supporting the dotting-wheel in the said body-section, and an ink-feeding device carried by the body-section, comprising members adapted for adjustment to and from the periphery of the dotting-wheel, as described.

2. In a dotting-pen, a body-section, a dotting-wheel, means for supporting the dotting-wheel at the lower extremity of the body, and an inking device carried by the body, comprising oppositely-bowed members fast to the body at their upper ends, their lower ends being pointed and free and adapted to receive between them the peripheral portion of the dotting-wheel, and adjusting devices for the said members of the inking device, whereby to carry the free ends of the members to and from the dotting-wheel, as described.

3. A dotting-pen having a body comprising oppositely bowed or curved members, the members having straight lower terminal portions, a pin carried by the straight portion of one member and adapted to pass through an aperture in the corresponding portion of the opposing member of the body, a dotting wheel or disk mounted to turn on the said pin between the body members, an inking device comprising two oppositely bowed or curved spring members attached at their upper ends to the upper faces of the body members, the lower or outer ends of the members of the said feeding device being free and pointed and adapted to occupy a position one at each side of the periphery of the dotting wheel or disk, an adjusting device for the body members, and adjusting devices for the members of the inking device independent of each other and independent of the adjusting device for the body members, as described.

4. A dotting-pen comprising oppositely-bowed body members, a pin secured to one body member at its lower end and adapted to pass through an aperture in the opposing body member, an inking device carried by the body, comprising oppositely bowed or curved members secured at their upper ends and free at their lower ends, the lower ends of the members of the feeding device being adapted to receive between them the peripheral portion of a dotting-wheel, and means for adjusting the members of the ink-feeding device, and independent means for adjusting the members of the body of the pen, as described.

5. A dotting-pen, comprising a body consisting of a fixed member and a pivoted member, an adjusting device for the two members, and a pin secured to one member and extending in direction of the opposite member, a dotting-disk, means for supporting the dotting-disk at the lower ends of the body members, an ink-feeding device comprising opposing spring and oppositely-curved members, attached at their upper ends to the members of the body, and means for adjusting the ink-feeding device, as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERNEST G. RUEHLE.

Witnesses:
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CHAS. EDGAR.