F. W. STERLING.

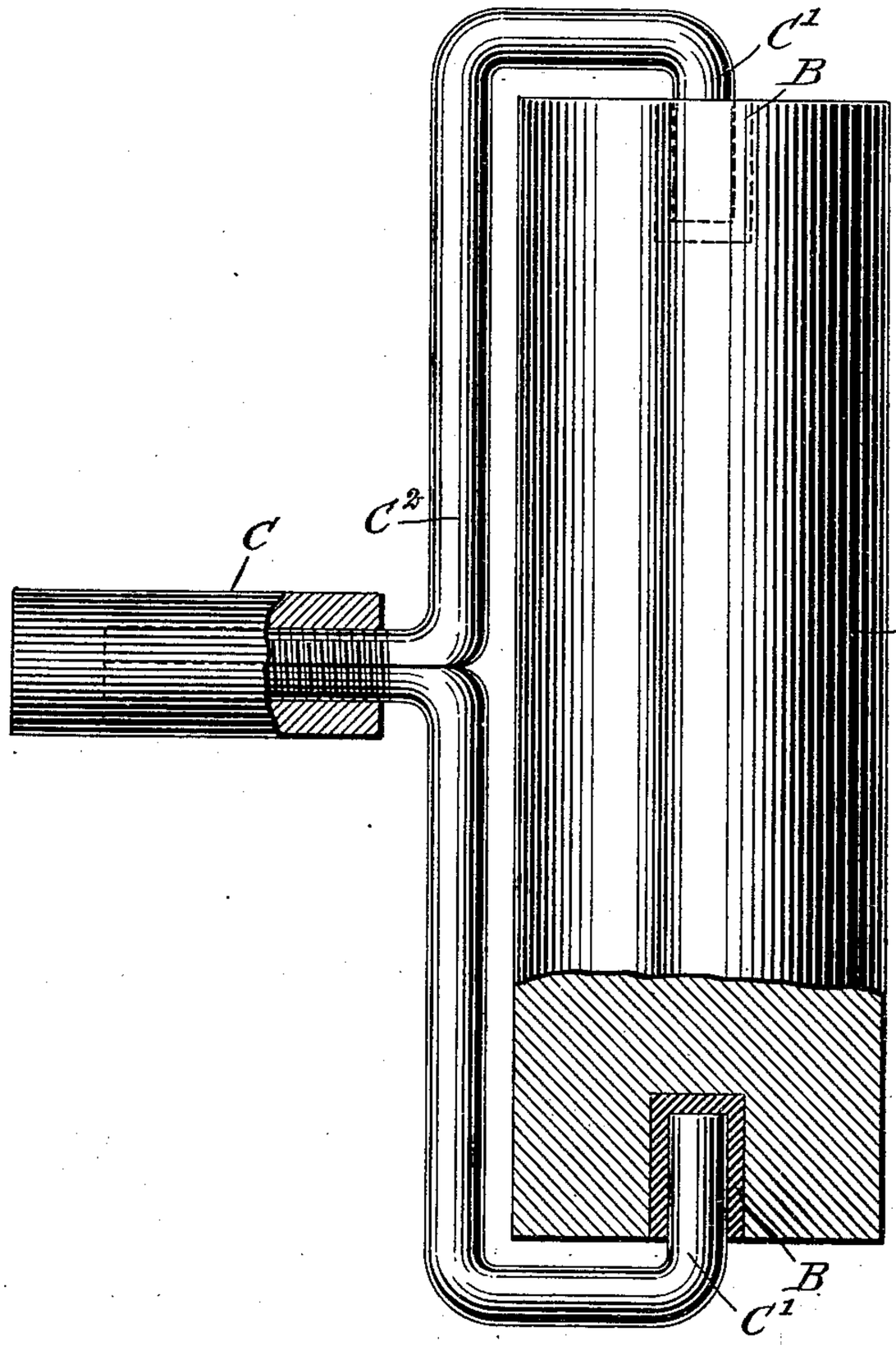
PARALLEL RULER.

APPLICATION FILED SEPT. 22, 1908.

935,424. **Patented Sept. 28, 1909.**

2 SHEETS—SHEET 1.

Fig. 1.



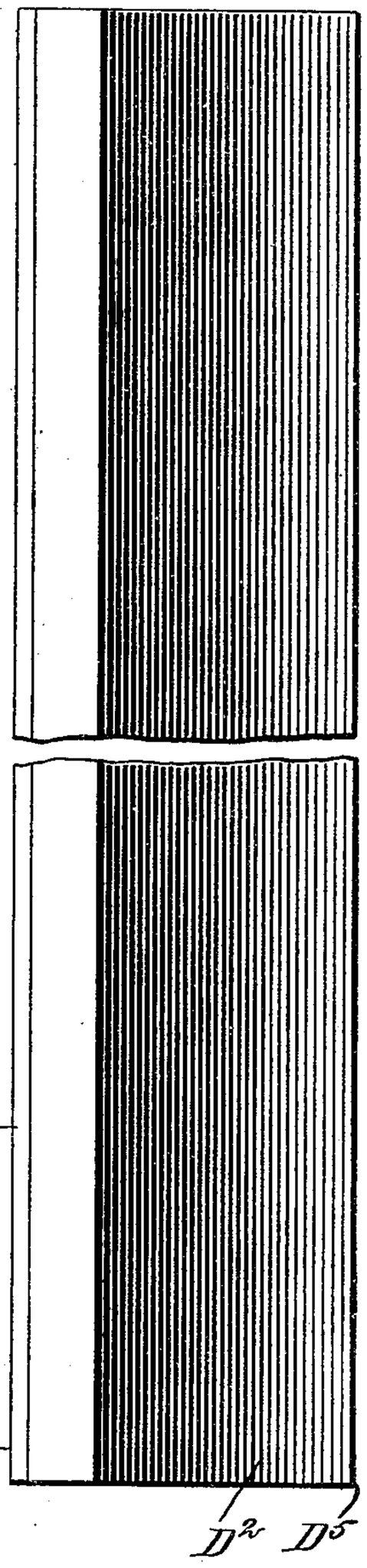
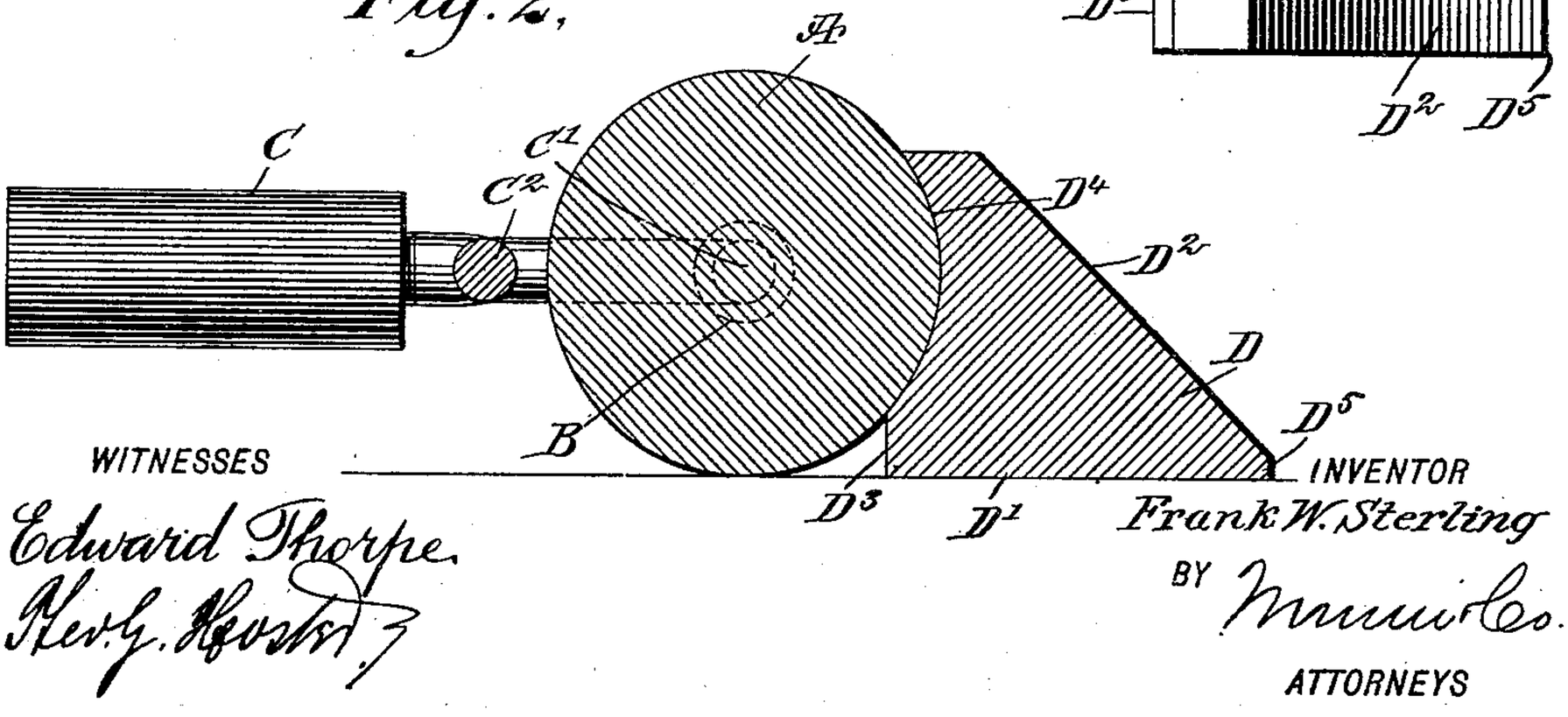


Fig. 2.



WITNESSES

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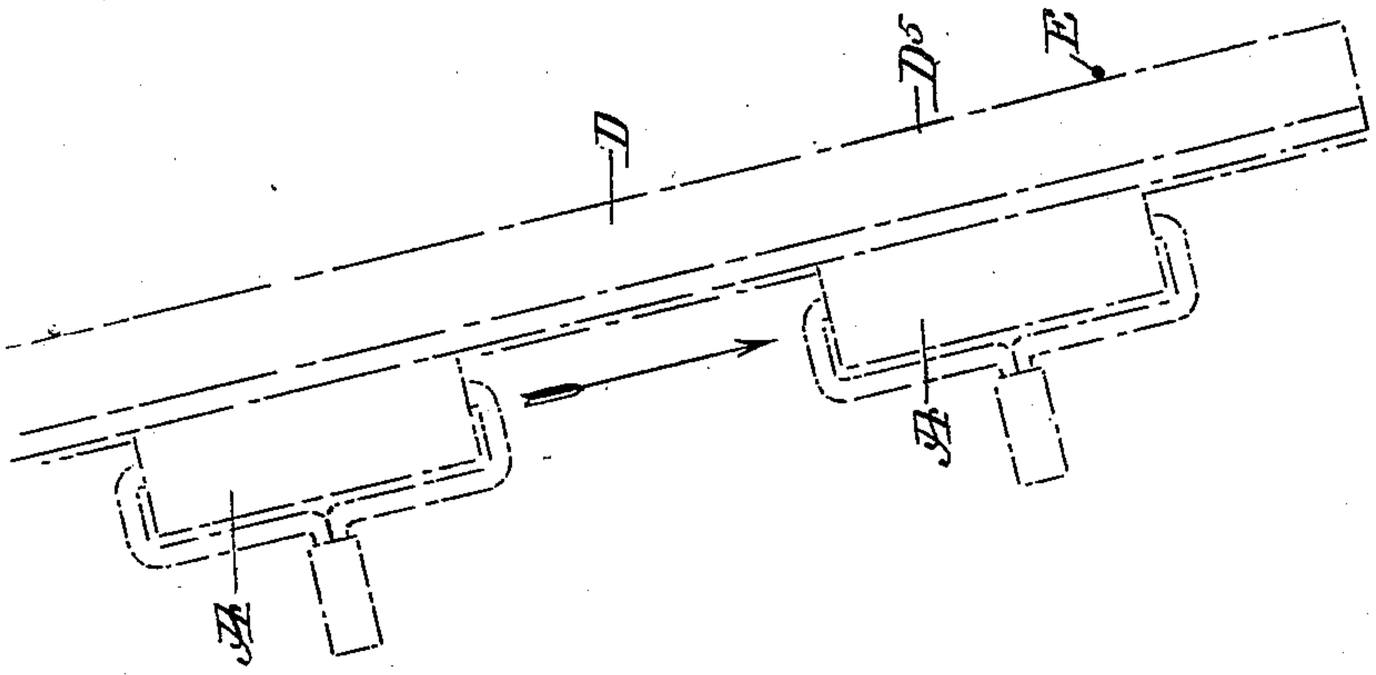
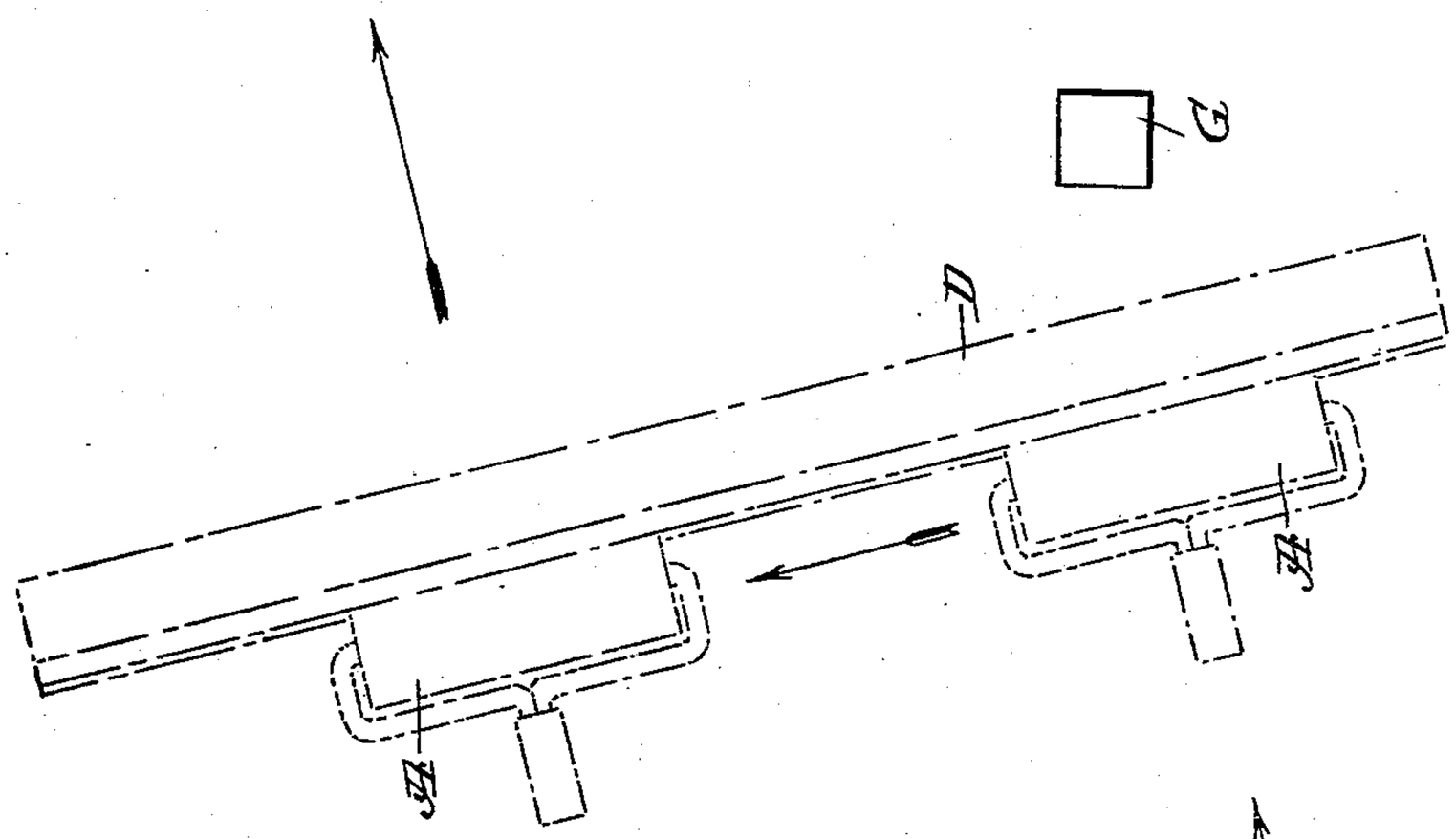
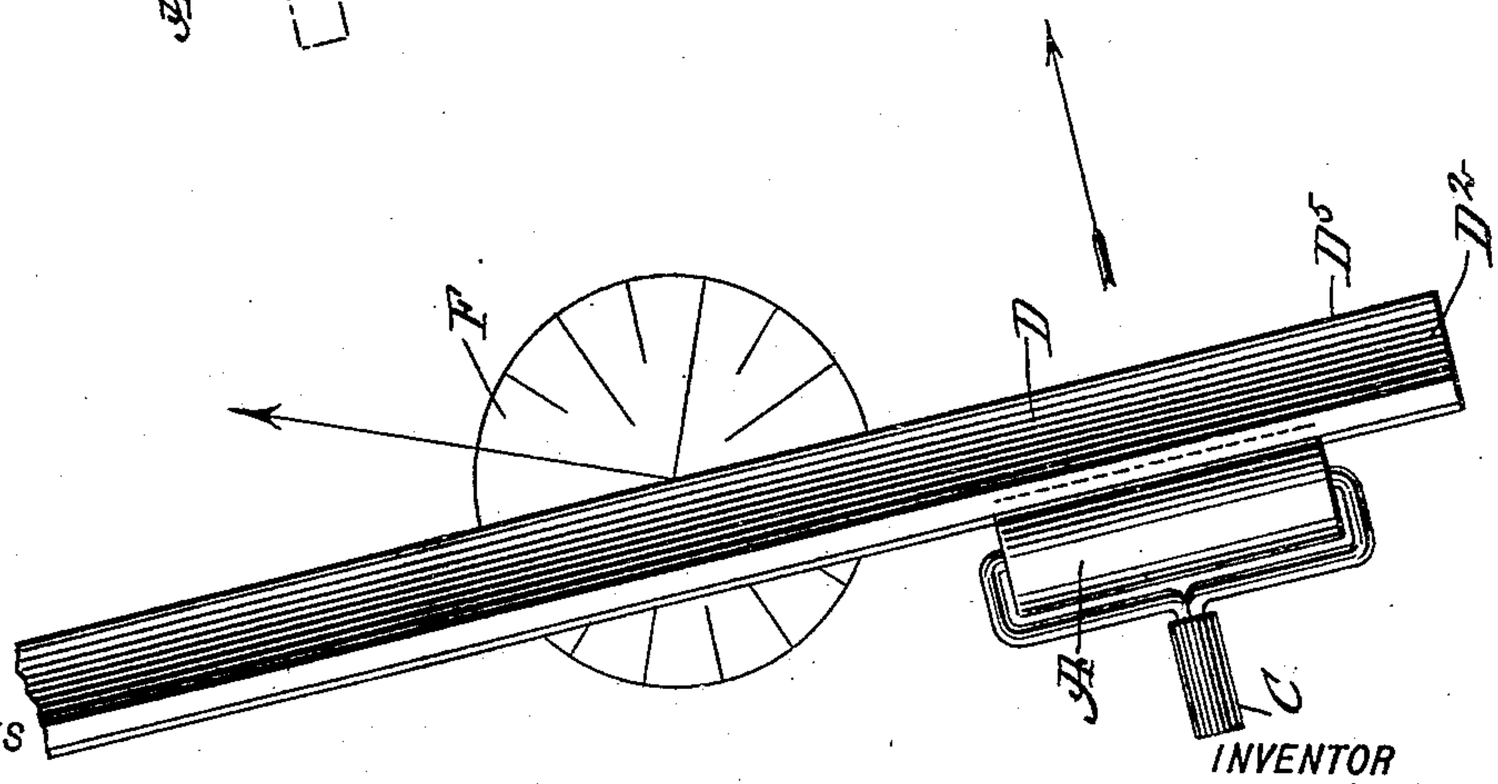


Fig. 3.





WITNESSES

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FRANK WARD STERLING, OF THE UNITED STATES NAVY.

PARALLEL-RULER.

935,424. Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed September 22, 1908. Serial No. 454,134.

To all whom it may concern:

Be it known that I, FRANK W. STERLING, of the United States Navy, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Parallel-Ruler, of which the following is a full, clear, and exact description.

The invention relates to drafting instruments, and its object is to provide a new and improved parallel ruler, more especially designed for the use of navigators and other persons, to permit them to accurately and quickly transfer parallel lines when translating courses on a chart.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improvement, parts of the roller being in section and the roller and straight edge being spaced apart; Fig. 2 is a sectional side elevation of the same, showing the straight edge in contact with the roller; and Fig. 3 is a plan view of the improvement applied for laying out a course through a certain point from a compass on a chart.

A roller A of a suitable material and size is provided centrally at its ends with bushings B engaged by trunnions C′ of a fork C^2 held on the end of a handle C, adapted to be taken hold of by an operator, for rolling the roller A over a chart or the like. A straight edge D is used in connection with the roller A, and this straight edge is of a suitable length and is provided with a flat base or a bottom D′, an inclined front D^2 and a back D^3 having a concave recess D^4, extending throughout the length of the back and beginning a distance above the bottom D′, so that the recess is approximately in alinement with the front peripheral face of the roller A, as indicated in Fig. 2. Now when the straight edge D is fitted onto the roller A, as shown in Fig. 2, then the front edge D^5 of the straight edge D is parallel with the axis of the roller A, and when the roller A is rolled over the surface of a chart or the like with the straight edge fitted on the roller, then the straight edge D is moved along to a desired position and which is parallel to its original position.

In using the device, for instance, for translating a course to and through a given point E on a chart (see Fig. 3), then the operator places the straight edge D with its edge D^5 onto the desired course indicated on the compass F arranged on the chart, and then the roller A is run into the recess D^4 while the straight edge D is held firmly in position, so that the axis of the roller A is now parallel with the edge D^5. The straight edge D is now removed from the chart and the roller A is run over the surface of the chart until it is near to the point E, and then the straight edge D is again engaged with the roller A and the latter is moved forward over the chart until the edge D^5 passes through the point E, and a line can now be drawn along the edge D^5, to indicate the desired course through the point E.

In case the roller A while being rolled over the chart toward the point E should meet an obstruction G, such as a weight for holding the chart to a table, then the roller A is run to within a distance of the obstruction G, and then the straight edge D is applied on the roller and held firmly in place on the chart, after which the roller is shifted from the position on the right of the middle dotted portion of Fig. 3 to the left on the straight edge, after which the straight edge is removed and the roller is pushed forward, and then the straight edge D is re-applied on the roller and moved forward until the edge D^5 passes through the point E, the same as previously explained.

From the foregoing it will be seen that the parallel ruler is very simple in construction and permits accurate and quick transferring of parallel lines from a compass to a desired point, as above described.

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

1. A parallel ruler, comprising a handled roller, and a separate straight edge having a flat bottom and a back at right angles to the bottom, said back being provided with a concave recess for the peripheral face of the roller to fit in, whereby the straight edge can be readily engaged with and disengaged from the roller and when engaged thereby will be held parallel with the axis of said roller and can be moved bodily over a surface by operating the roller.

2. A parallel ruler, comprising a handled roller, and a separate straight edge having a flat bottom and a back at right angles to the bottom, said back being provided with a concave recess for the peripheral face of the roller to fit in, the recess beginning a distance above the bottom of the straight edge.

3. A parallel ruler, comprising a handled roller, and a separate straight edge having a flat bottom, an inclined front and a back at right angles to the bottom, said back being provided with a concave recess for the peripheral face of the roller to fit in, the recess beginning a distance above the bottom of the straight edge and extending throughout the length of the back.

4. In a ruler of the character described, a straight edge comprising a body having an inclined front, a flat bottom, and a back at right angles to the bottom and having a longitudinally extending concave recess therein, said recess extending from a short distance from the bottom of the body to the top of the same and adapted to receive a roller to permit the straight edge to be moved over a surface thereby.

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

FRANK WARD STERLING.

Witnesses:

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J. F. O'MORA.