No. 865,586. PATENTED SEPT. 10, 1907.

G. M. HEALLEY.

MULTIFORM CURVE RULE.

APPLICATION FILED FEB. 6, 1907.

2 SHEETS—SHEET 1.

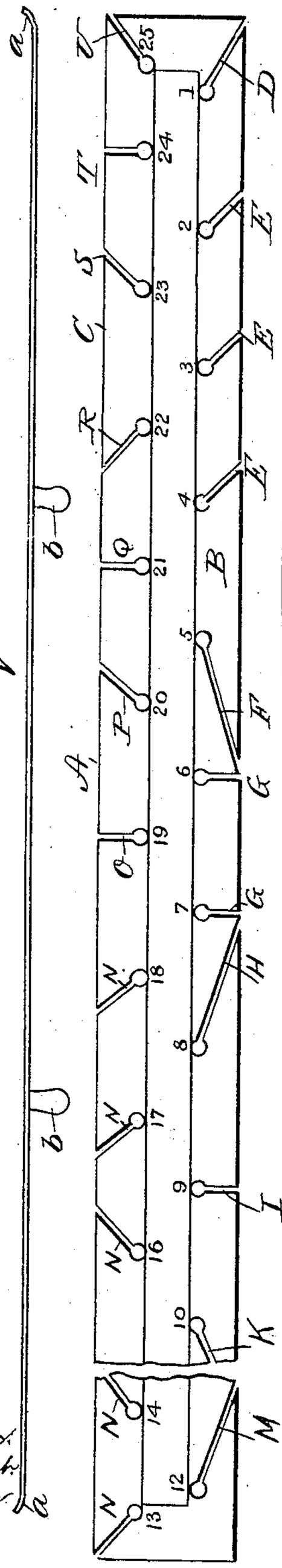

Fig. 2.

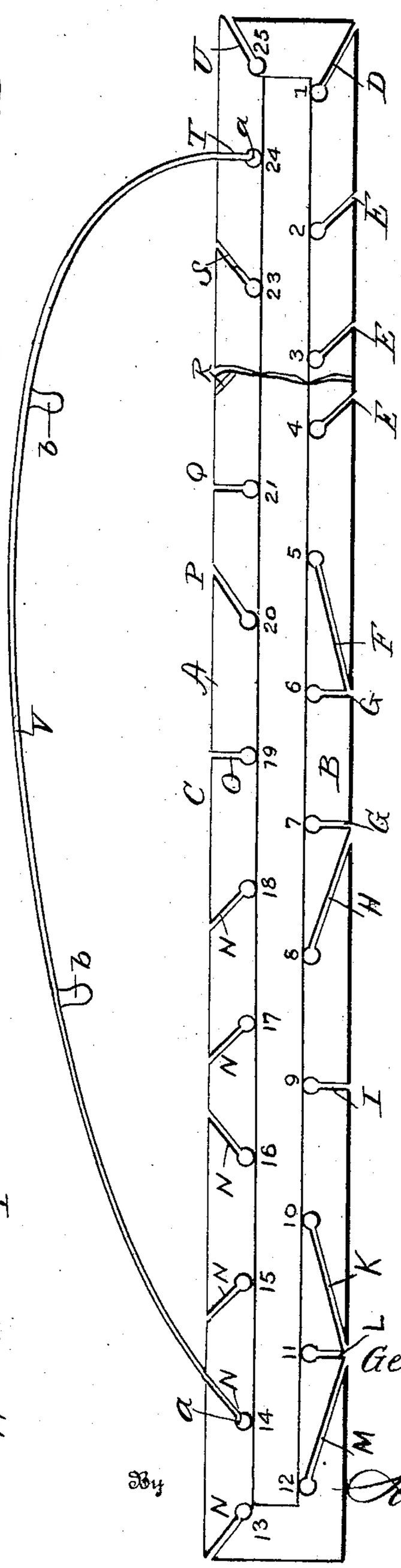

Fig. 1.

Witnesses:
L. L. Bucket.
K. T. McKeever.

Inventor:
Geo. M. Healley,
By Thos. Pagger & Co.
Attorneys.

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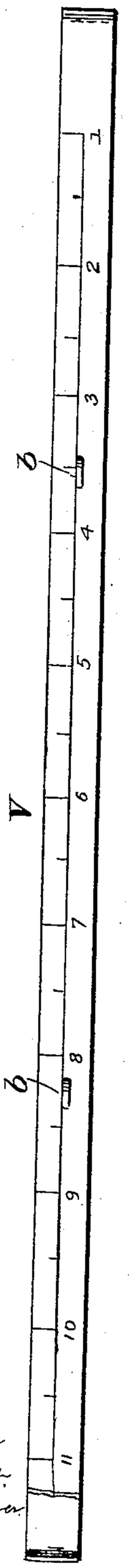
2 SHEETS—SHEET 2.

Fig. 3



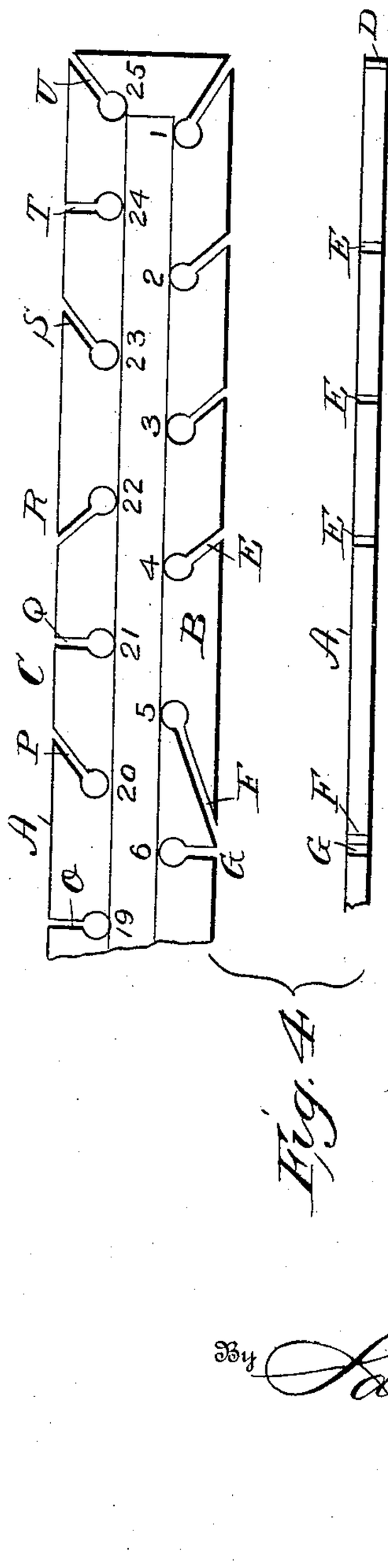




Fig. 4

Witnesses
L. L. Bucket.
H. T. McKeever.

Inventor:
Geo M. Healley,

By Law Pagger & Co.,
Attorneys.

# UNITED STATES PATENT OFFICE.

GEORGE M. HEALLEY, OF LA CROSSE, WISCONSIN.

## MULTIFORM-CURVE RULE.

No. 865,586. Specification of Letters Patent. Patented Sept. 10, 1907.

Application filed February 6, 1907. Serial No. 356,050.

*To all whom it may concern:*

Be it known that I, GEORGE M. HEALLEY, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Multiform-Curve Rules, of which the following is a specification.

My invention relates to improvements in what may be termed curve scribers and plotters. Its objects are to provide for producing or scribing an outline of any required curvature, as in drafting or plotting; and to carry out that end in a simple, expeditious and effective manner.

Said invention consists of certain structural features or instrumentalities, substantially as hereinafter fully disclosed and specifically pointed out by the claims.

In the accompanying drawing illustrating the preferred embodiment of my invention—Figure 1 is a plan view thereof with the parts or members assembled for practical use. Fig. 2 is a like view with said parts or members disassembled, the celluloid or steel spring strip member being in its operative or edgewise position. Fig. 3 is a view showing the latter member lying in a flat detached position, and Fig. 4 shows a broken side view and an edge view of the base or rule member, more clearly disclosing its structural features.

In carrying out my invention, I suitably provide a preferably rectangular member A which is preferably eighteen inches in length for convenience in use as a rule. Said member is provided with series of slots, one series B being arranged along, and opening out through one longitudinal edge thereof and with the slots thereof terminating at their inner ends in apertures or orifices made in said member, and numbered from right to left 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and the other series C the slots whereof terminating at their inner ends in apertures or orifices also made in said member and numbered from left to right 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, and opening out through the opposite longitudinal edge of the latter. The right-hand end slot D of the slot-series B, is inclined toward said end; the next three of said series, as E, have a less inclination in the same direction; a fifth slot, as F, inclines in the opposite direction, at a greater angle; the two central slots, as G, are at right-angles to the longitudinal axis of the member A; the next one to the left of the latter, as H, is inclined to the right or in an opposite direction to the slot F; the next one to H, as I, is also at right angles to the edge; while in the final three or group of said slots, as K, L, M, the middle one is at right angles to the edge and the lateral ones are inclined in opposite directions to each other and toward said middle one. Of the slot-series C, a number thereof, say six, as N, are inclined alternately in opposite directions with relation to each other; one, as O, is at right angles to the edge; one, as P, is inclined to the right; one, as Q, is at right angles to the edge; two, as R, S, are oppositely inclined to each other; one, as T, is at right angles to the edge, and one, at the extreme right-hand end of the series C, as U, is inclined to the right.

I also provide for use in connection with the member A, what may be termed a blade V, preferably of celluloid or a strip of spring steel, about twelve inches in length, which may have its ends slightly curved or bent as at *a*, preferably as last noted for greater efficiency for the retention thereof in operative position in the slots aforesaid into which its ends are inserted as presently described, especially in slots considerably removed from each other. Said blade-member is suitably graduated to indicate inches and fractions thereof upon the same, as shown, the purpose of which will be readily appreciated in the practical application of the device. Said blade-member is suitably equipped upon its relatively inner side with what may be designated as finger-pins *b* for conveniently applying the fingers in effecting the retention of said blade-member in place, as against flexing as the pencil is passed in contact therewith and guided in scribing a curvature or outline as will be readily appreciated. The various numerals used herein especially upon the member A may be substituted by letters, or other form of exponents desired, and said member may have scribed thereon other suitable indicia as may be found desirable in the use of the same.

As an example of the use of this device, it is noted that the member A, having the blade V adjusted in any two of the slots thereof, as for instance in producing the semi-egg-shaped outline or curvature shown in the drawing, the device is disposed with the first named member flat upon the paper or surface, the member V, of course, resting or being presented edgewise thereto. The requisite tracing or reproduction of said outline as suggested by said blade-member may now be effected by the requisite passing of the pencil or other marking medium conformably with the latter along or upon said paper or surface, a hand resting upon and holding the member A in place and the fingers being applied to the finger-pins *b* for the steadying or fixing in place the celluloid or steel member V as above noted. It is further observed that any other of the numerous outlines or curves, as may be found requisite, as in drafting and like work, may be reproduced by effecting the requisite adjustment between the sundry slots of said member A and the flexible blade-member V, as, in use, the device will readily suggest, and it is therefore thought it will not require further elaboration herein regarding the same.

The device as described and disclosed by the drawing is exceedingly simple, inexpensive and readily applied, as is apparent.

I claim—

1. A device of the character described, comprising a member having sundry slots in its longitudinal edges opening into apertures or orifices in said members and a flexible member having bent or curved ends for effective retention in said apertures and slots.

2. A device of the character described, comprising a member equipped in its longitudinal edges with inclined and perpendicular slots, and a flexible blade-member adapted for insertion at its ends into said slots.

In testimony whereof I affix my signature, in presence of two witnesses.

GEO. M. HEALLEY.

Witnesses:

JOHN F. DOHERTY,

MAY O'NEIL.