

No. 632,538.

Patented Sept. 5, 1899.

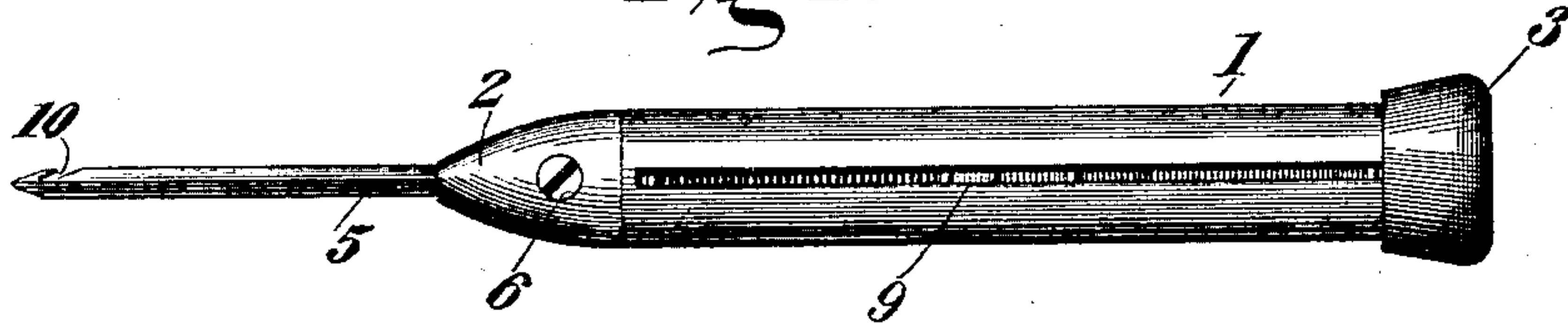
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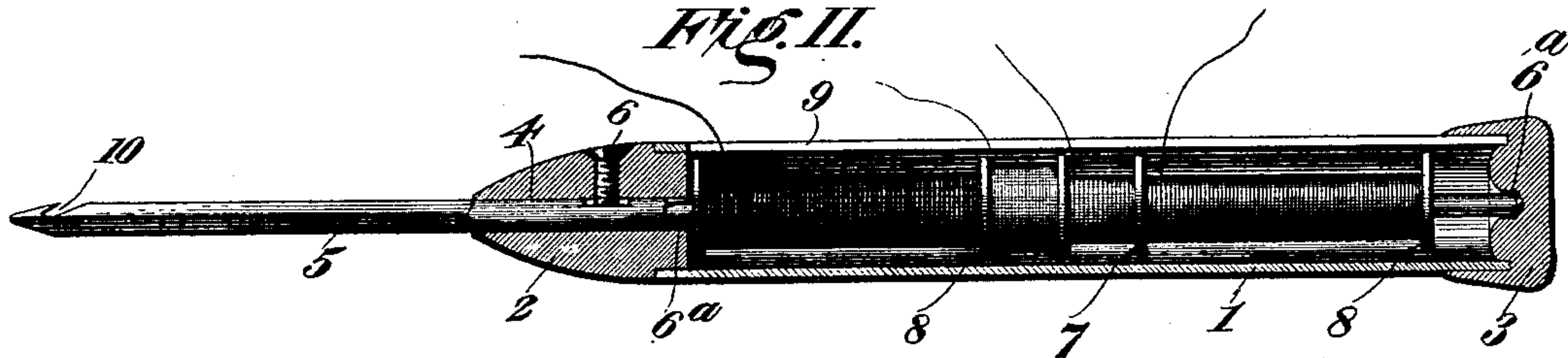
(Application filed Aug. 25, 1897. Renewed Aug. 2, 1899.)

(No Model.)

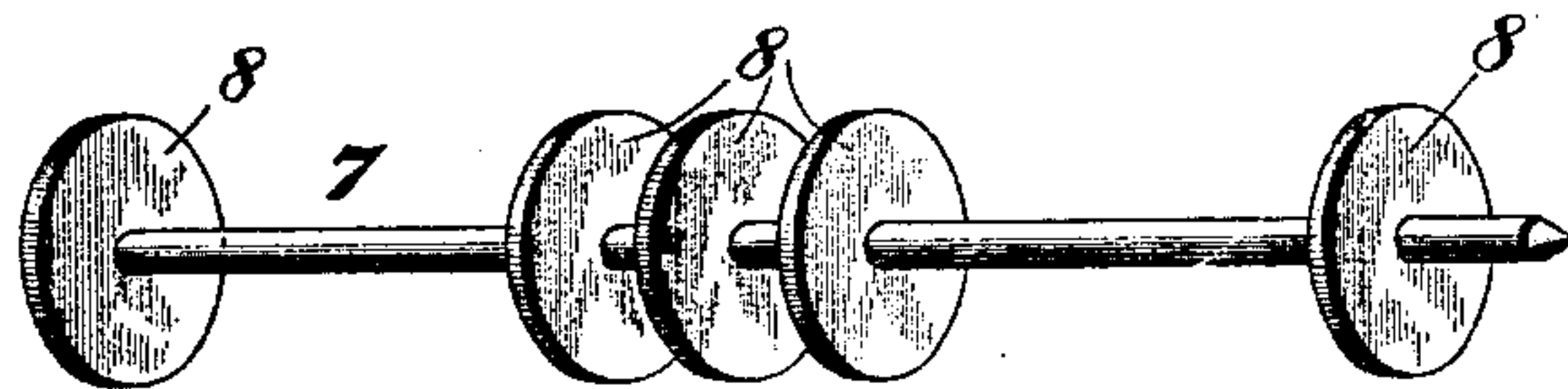
*Fig. I.*



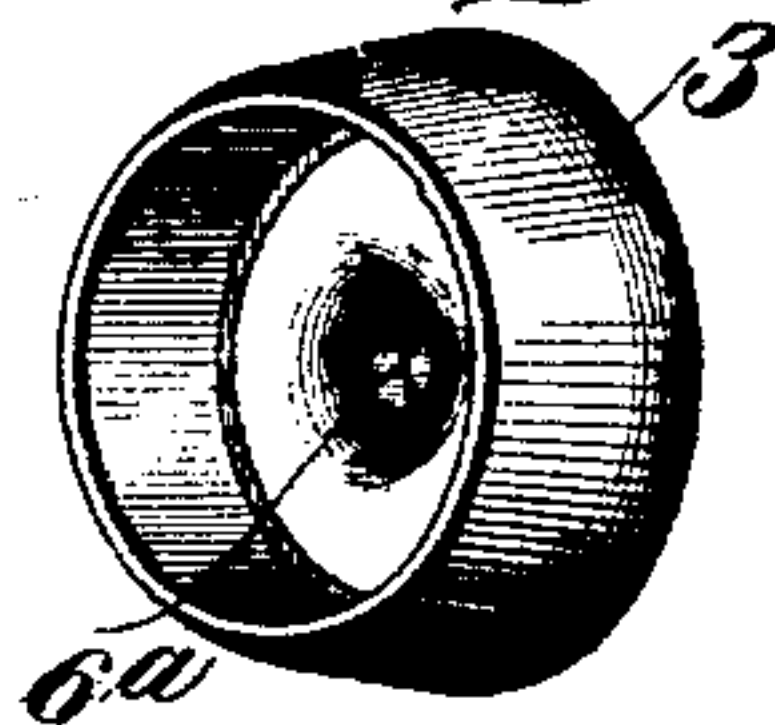
*Fig. II.*



*Fig. III.*



*Fig. IV.*



*Fig. V.*



*Fig. VI.*

Witnesses

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# UNITED STATES PATENT OFFICE.

DIETRICH RIPPE, OF LANHAM, NEBRASKA.

## AWL.

SPECIFICATION forming part of Letters Patent No. 632,538, dated September 5, 1899.

Application filed August 25, 1897. Renewed August 2, 1899. Serial No. 725,926. (No model.)

*To all whom it may concern:*

Be it known that I, DIETRICH RIPPE, of Lanham, in the county of Gage, State of Nebraska, have invented certain new and useful Improvements in Awls, of which the following is a complete specification, reference being had to the accompanying drawings.

The object of my invention is to produce an improved awl, by the aid whereof neat and regular stitching resembling machine stitching may be done by inserting the awl-point from one side through material to be stitched.

In the accompanying drawings, Figure I is a side elevation of my awl complete. Fig. II is a longitudinal sectional view of the same. Fig. III is a perspective view of the spool removed from the handle. Fig. IV is a similar view of the handle-cap detached. Fig. V is a view of one form of awl-point on a highly-magnified scale. Fig. VI is a view taken at right angles to Fig. V.

Referring to the figures on the drawings, 1 indicates a hollow handle that is provided at one extremity with a point-retaining end 2 and at the other extremity with a removable cap 3. The point-retaining end is provided with a bore 4, extending longitudinally entirely through the end or head, of uniform diameter throughout its length and coaxial with the handle, and is adapted to receive an awl-point 5, which may be retained by suitable mechanism—for example, a set-screw 6.

I provide in the inner face of the cap 3 a bearing-aperture 6<sup>d</sup> in axial alinement with the bore 4, the inner end of which constitutes a similar bearing. In the bearing-apertures 6<sup>d</sup> thus formed in the opposing inner faces of the retaining end or head 2 of the cap 3 are journaled the axial trunnions of a spool 7, for the reception of which the handle 1 is made hollow, as specified. The spool is of sufficient length to engage in bearings in the head 2 and cap 3, respectively, and is divided, as by disks 8, into thread-containing compartments. I prefer to divide the spool into a series of compartments, upon which different kinds of thread may be wound.

9 indicates a longitudinal slit in the side wall of the handle 1, through which the end of the thread passes, so that it may be supplied to the awl-point, and through which it may be from time to time, as required, unwound from the spool.

By the construction and arrangement of the parts specified the trunnion of the spool at the point or awl end of the handle extends into the rear extremity of the bore 4 and has bearing against the butt of the awl-point 5. Thus the latter when secured in place constitutes a thrust-bearing for the spool and prevents the contiguous faces of the head and one of the terminal disks of the spool from coming into such frictional contact as would prevent the free rotation of the spool within the handle. This relation of the adjustable point or awl proper to the contiguous trunnion of the spool makes possible a regulation of pressure upon the trunnions of the spool, which will insure a proper and uniform resistance to the rotation of the spool by a pull upon the thread when the device is in use.

The awl-point may be straight or curved, as preferred, its distinctive feature being that its entering end is oblong in cross-section, and is provided near its point with a notch 10, that opens toward the handle 1 and is cut transversely through the narrow extent of the oblong point.

What I claim is—

In an awl, the combination with a hollow handle having at one end a solid point-retaining head provided with an axial bore extending entirely therethrough and of uniform diameter throughout, of a cap designed to be retained upon the open end of the handle and having a bearing aperture or recess in its inner face in axial alinement with the bore through the head, a spool within the hollow handle and provided with terminal trunnions extending into the inner end of the bore and the bearing-aperture in the cap respectively, an awl-point extending into the bore in the head of the handle and constituting a thrust-bearing for the contiguous trunnion of the spool, and means for securing the point in place, the hollow handle being provided with a longitudinal slit for the passage of the thread wound upon the spool, substantially as specified.

In testimony of all which I have hereunto subscribed my name.

DIETRICH RIPPE.

Witnesses:

WM. WIETERS,  
JAS. BENDER.