

No. 611,127.

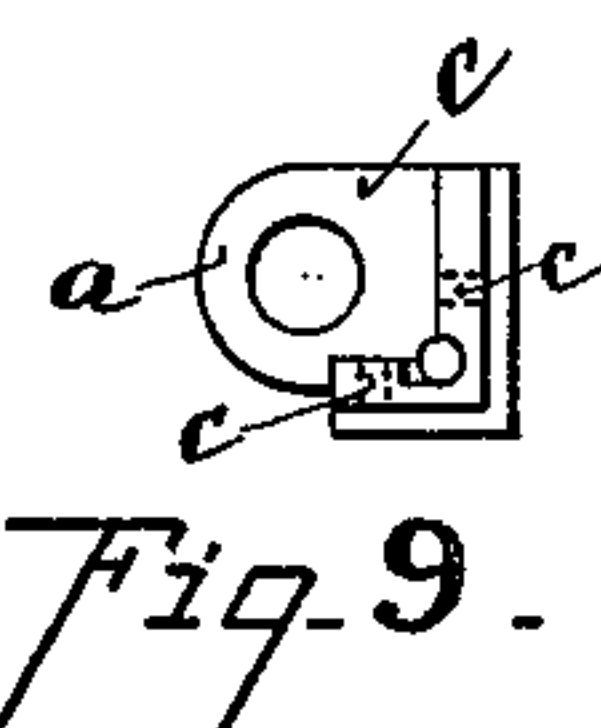
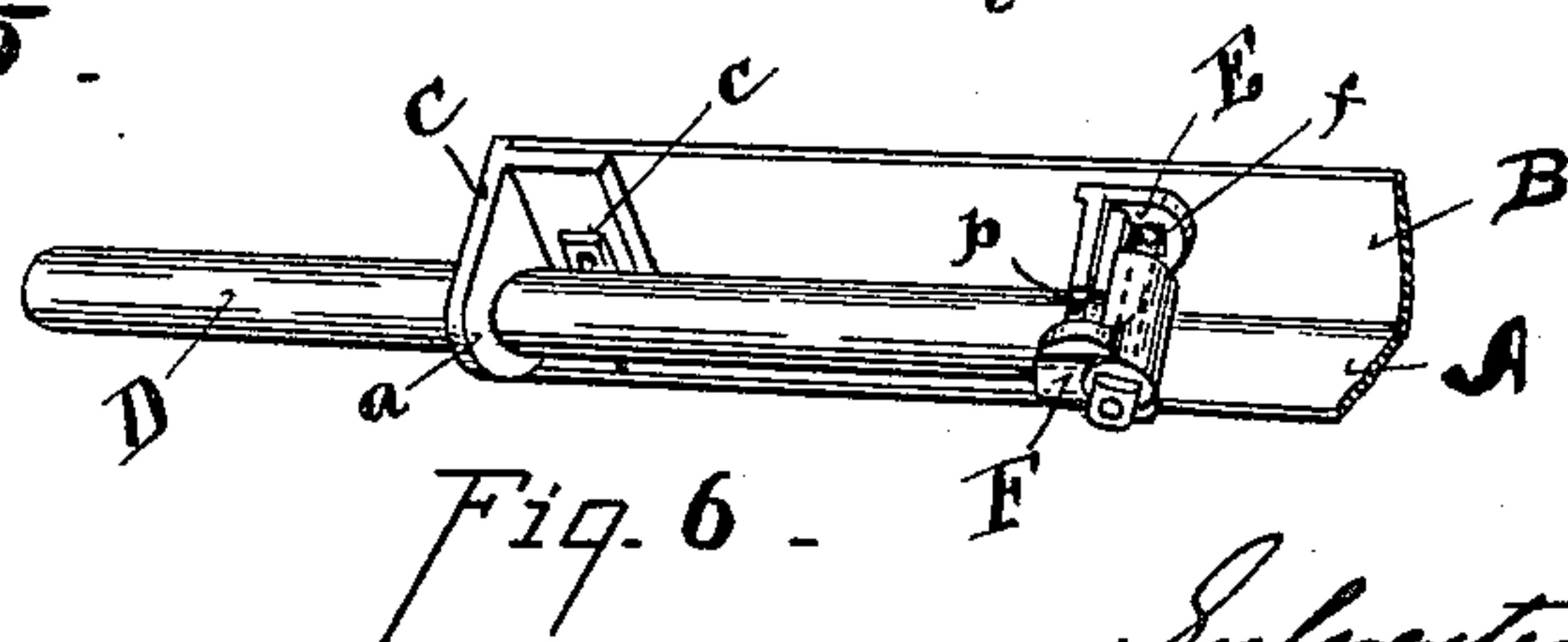
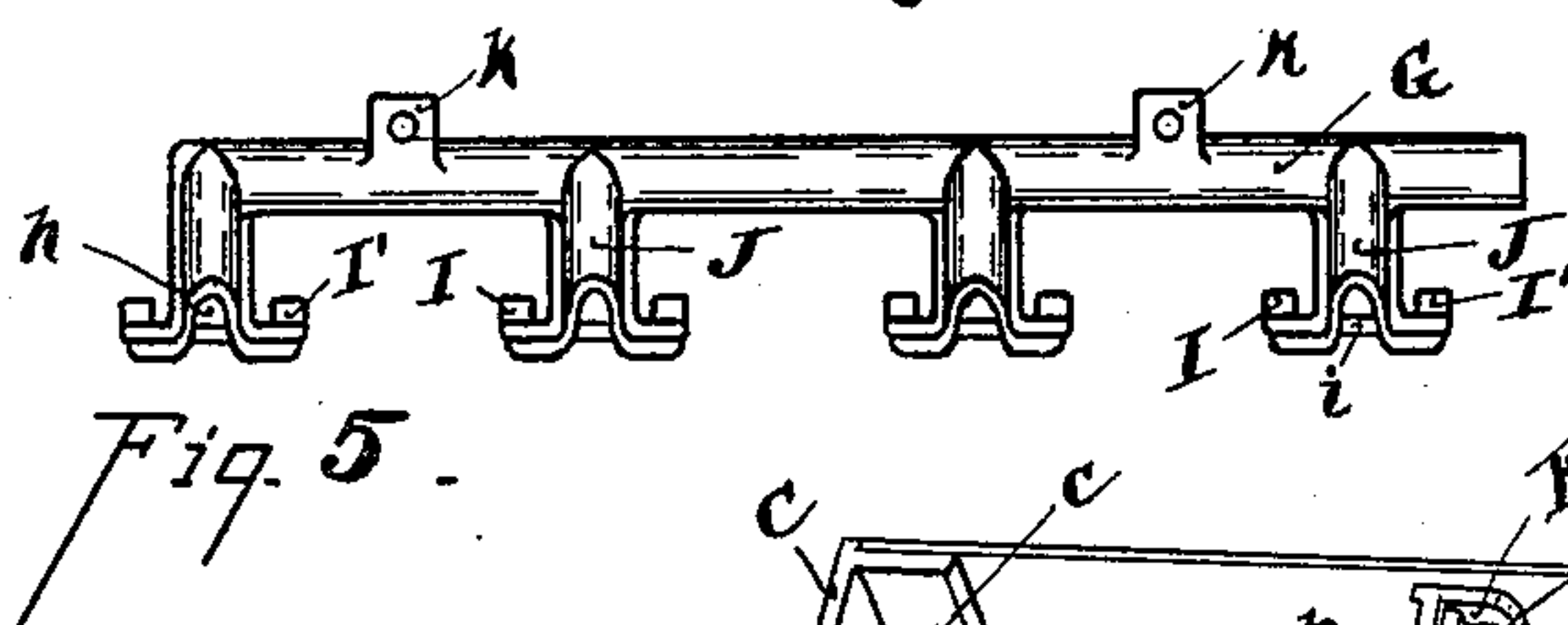
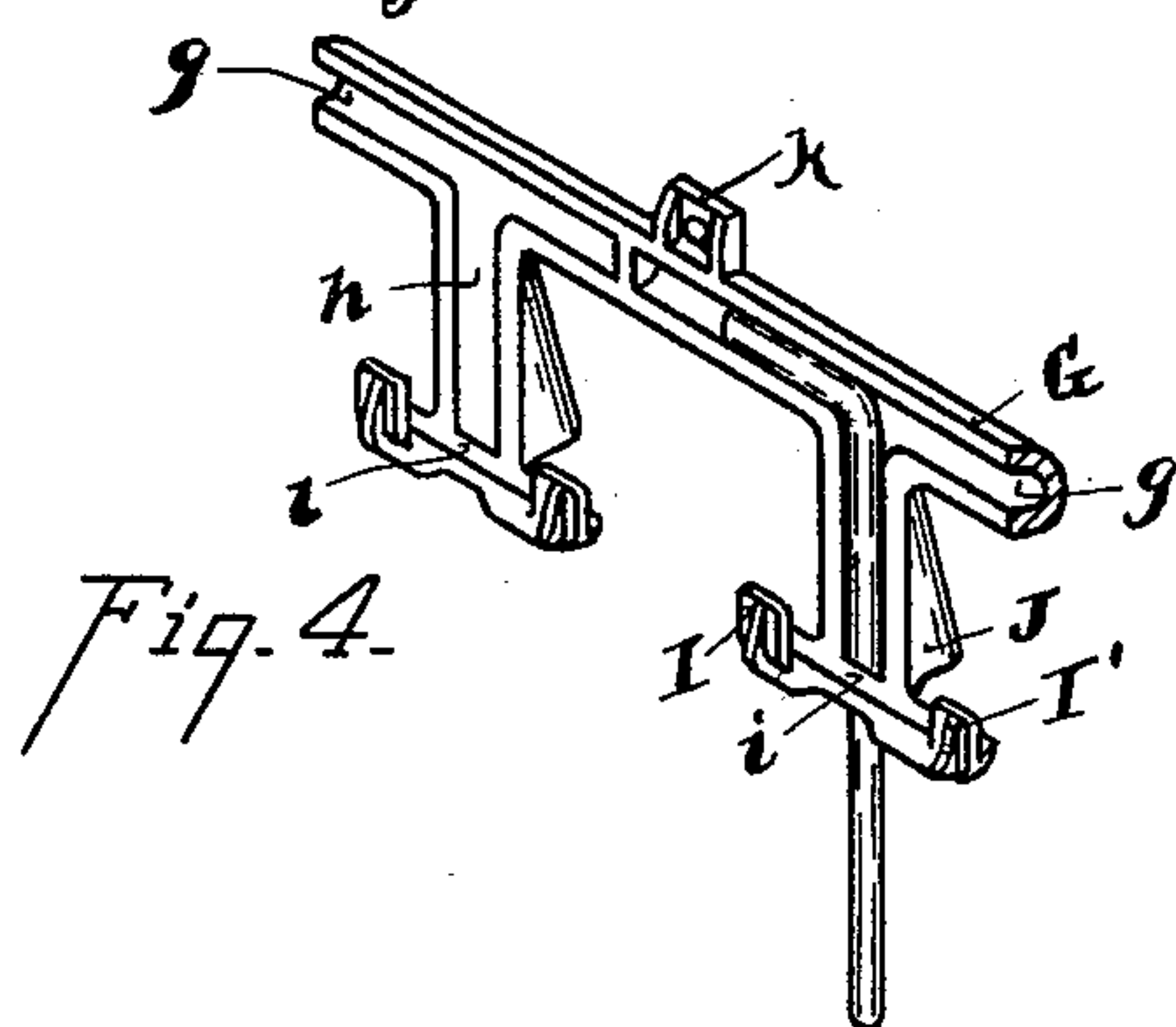
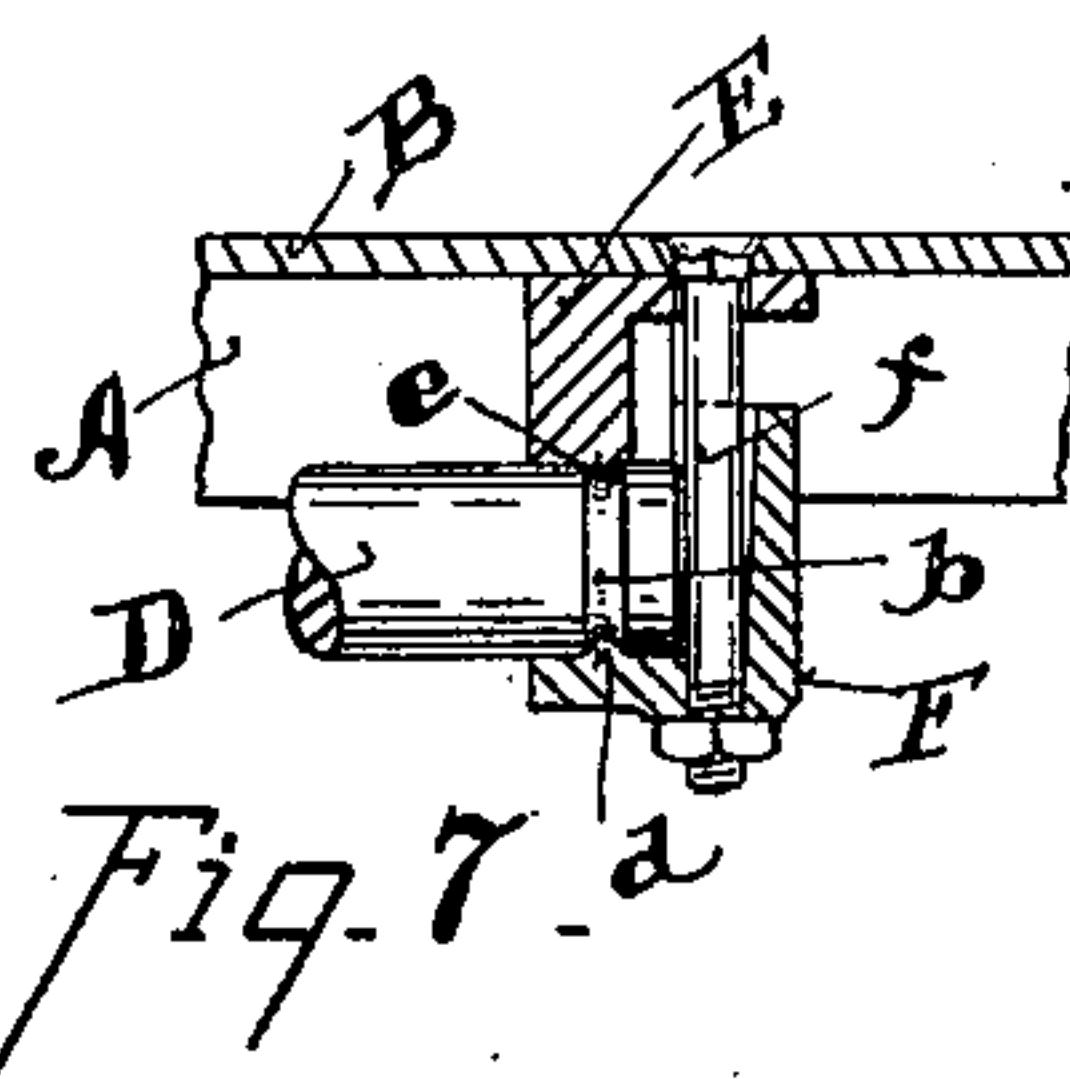
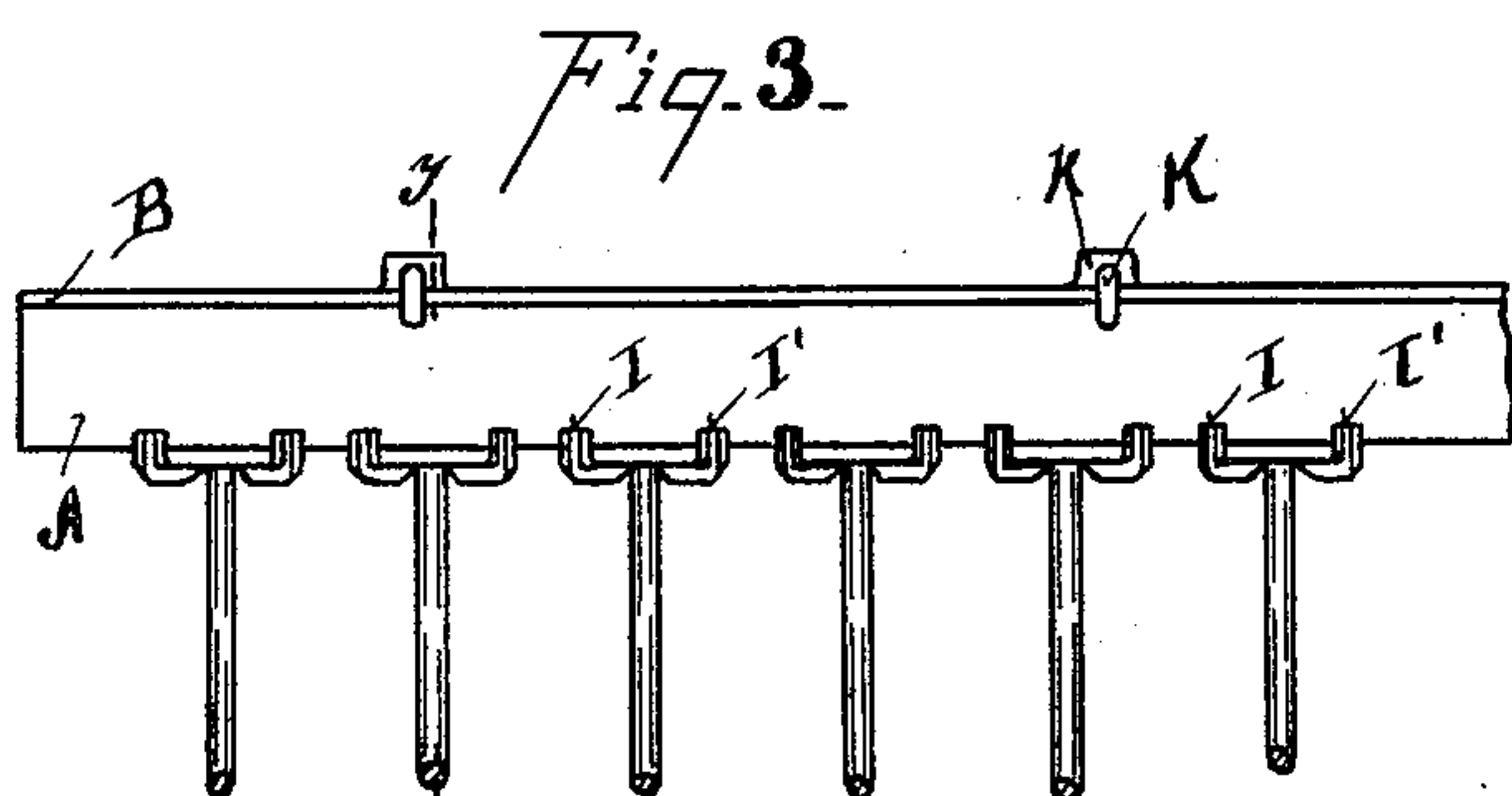
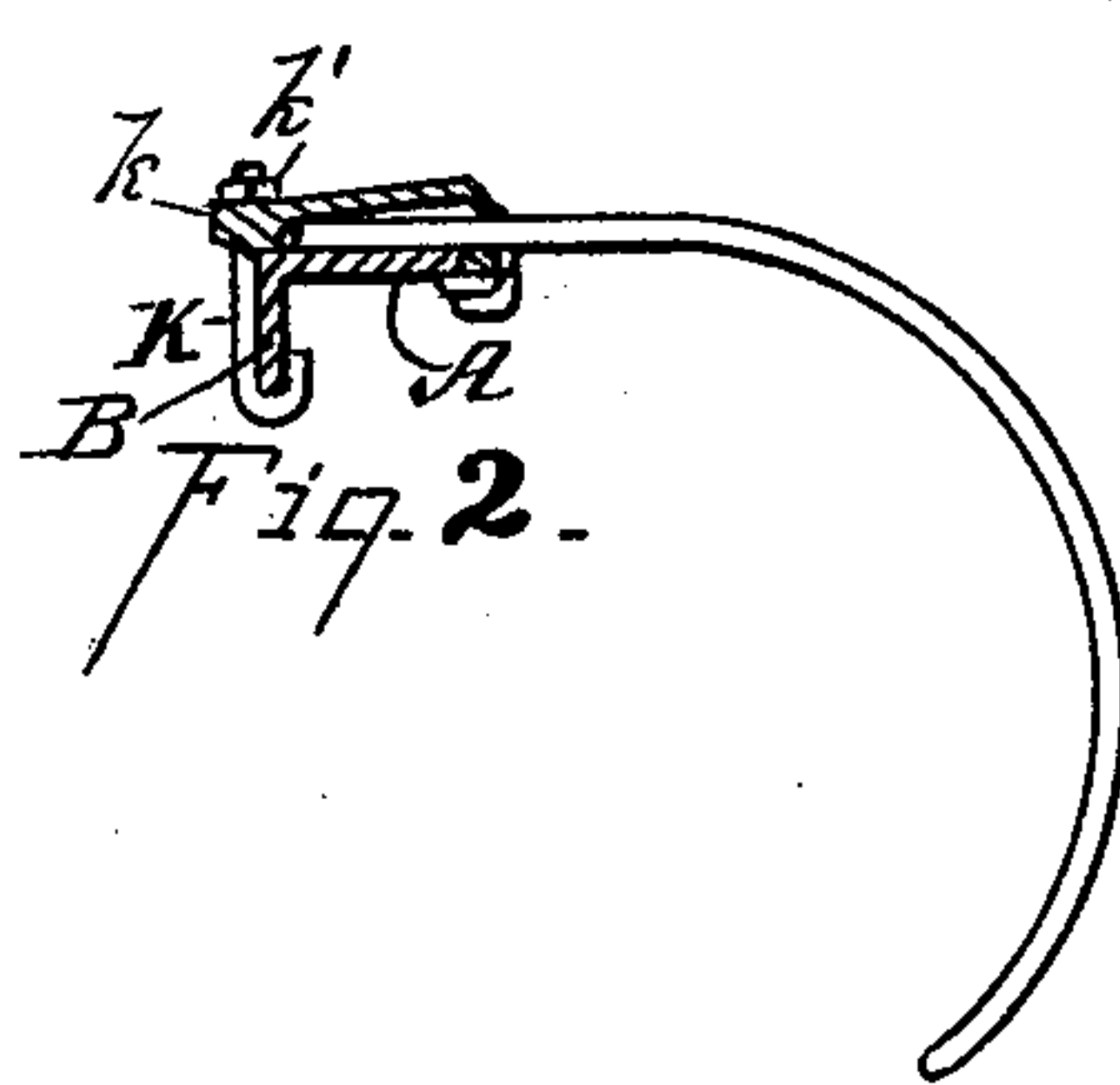
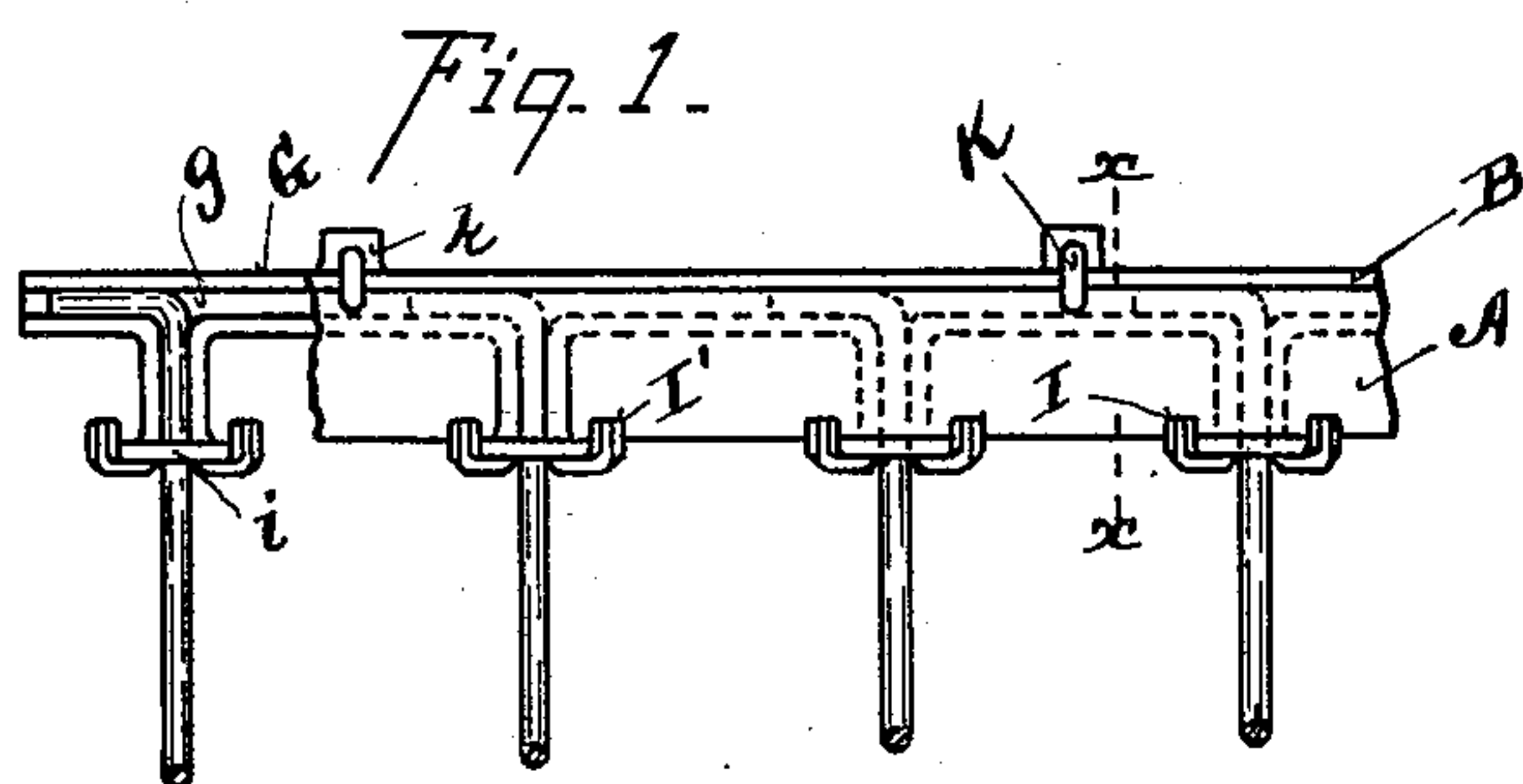
Patented Sept. 20, 1898.

S. H. JONES.

RAKE HEAD.

(Application filed Nov. 22, 1897.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

SYLVESTER H. JONES, OF RICHMOND, INDIANA, ASSIGNOR TO THE HOOSIER
DRILL COMPANY, OF SAME PLACE.

RAKE-HEAD.

SPECIFICATION forming part of Letters Patent No. 611,127, dated September 20, 1898.

Application filed November 22, 1897. Serial No. 659,453. (No model.)

To all whom it may concern:

Be it known that I, SYLVESTER H. JONES, residing at Richmond, in the county of Wayne and State of Indiana, have invented certain
5 new and useful Improvements in Rake-Heads, of which the following is a specification.

My invention relates to an improvement in horse-rake heads.

The object of the invention is, first, to provide improved means for attaching the teeth to the rake-head, the device being so constructed that a number of teeth may be attached by the same anchoring device.

Another object of my invention is to provide a rake-head having a plane base to which the teeth may be attached by an anchoring device readily attachable and detachable, the said anchoring devices being also adapted to be interchangeable on said base, so as to
20 provide a greater or less number of teeth on the same base, as required.

Another object of my invention is to provide cheap and effective means of constructing the various parts of my device.

25 The features of my invention are more fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a bottom plan view of the rake-head section, one end of which is broken away to show a portion of the anchoring-section. Fig. 2 is a section on line *y y* of Fig. 3. Fig. 3 is a bottom plan view of the rake-head. Fig. 4 is a bottom perspective view of one of the anchoring-sections. Fig. 5 is a top perspective view of the same. Fig. 6 is a perspective view showing the manner of attaching the axle to the rake-head. Fig. 7 is a sectional view taken on the line *z z* of Fig. 6.
40 Fig. 8 is a section on line *x x*, Fig. 1. Fig. 9 is an end view of the outside axle-bracket.

A represents the base of the rake-head. The top of the rake-head is in the preferred form a plane, and it is strengthened by a vertical depending flange B, preferably in the form of an angle-iron.

50 C represents the end axle-bracket, which with the angle-iron form of base is of a like shape and seats within the angle formed by the parts A B and is secured in position by the bolts *c*.

a represents the ear of the bracket, through which a stub-axle passes. The inner bracket for supporting the end of the stub-axle D is made in two sections E F, which parts are
55 adapted to clutch the axle and hold it from turning, as shown in Figs. 6 and 7. In order to prevent the axle from moving endwise, it is provided with a groove *b*, and the bracket-section F is provided with a boss *d*, and section E is provided with a boss *e*, said bosses fitting in said groove.
60

f represents a clamping-bolt passing through said sections and clamping the axle firmly in position between said sections. Any
65 means for clamping the rear axle by a divided separable bracket adapted to hold the axle from moving in said rake-head is an equivalent of this device.

It is very desirable in the construction of rake-heads to provide ready means for attaching and detaching the rake-teeth. I have not only provided new and improved means for doing this, but the anchoring-sections are made interchangeable, so that anchoring-sections adapted to hold different numbers of teeth may be secured to the rake-head, as desired. G represents said anchoring-sections. Each section is provided with longitudinal grooves *g h*, adapted to receive the shank
80 and neck of a rake-tooth. These anchoring-sections are firmly clamped to the top or plane face of the rake-head, preferably by the following means:

I I' represent hooks upon each side of the sockets J, in which the rake-teeth are held. These hooks engage upon the under side of the base A.
85

K represents a hooked screw-bolt, with its hook portion engaging over the end of the vertical flange B of the base, the threaded portion extending up through the ear *k* of the section G. These hook-bolts are firmly secured by nuts *k'*. Thus these sections are securely anchored to the base A by hook
95 members, one set of which hooks is made detachable, so that each section may be readily removed. In Fig. 1 I have shown one of said anchoring-sections provided with seats for four teeth, in Fig. 3 for six teeth, the number
100 of course being arranged as desired. In the preferred form of construction the hook mem-

bers I are connected integrally to the bar *i*, extending below the tooth. When made in this manner, the point of the tooth is inserted through the socket under this bar until the bent portion is brought into its seat in the grooves *g h*, when the section is filled in the manner described.

In the use of horse-rakes the requirements of the different localities vary largely as to the number of teeth required for a given size of rake-head. By the method of construction herein shown all parts of the rake-head are made exactly the same, excepting the anchoring-sections, which being interchangeable allow the ready mounting of the rake for all varieties of requirements, the sections being constructed to support a greater or less number of teeth to suit the ground upon which the rake is to be used.

Having described my invention, I claim—

1. In a rake-head, the combination of a base, an anchoring device provided on its inner face with a series of rectangular sockets, said base being adapted to lie against said anchoring device, hooks formed on the inner face of one edge of said device and adapted to engage over the edge of the base, means for clamping the other edge of the anchoring device to the other edge of the base, a series of rake-teeth each provided with a bent-headed end adapted to lie within one of the rectangular sockets and to be clamped securely between said anchoring device and said base, substantially as described.

2. In a rake-head the combination of an angle-iron base, one or more anchoring-sections provided with hooks on the inner face at one edge of each section, said hooks being adapted to engage over an edge of the angle-iron base, and means for clamping the other

edge of the section to the other edge of the angle-iron base, a series of angular sockets formed on the inner face of each section, a series of rake-teeth each provided with a bent end adapted to fit said sockets, whereby said teeth may be securely clamped in position between said sections and base, substantially as described.

3. In a rake-head the combination with an angle-iron base, one or more anchoring-sections provided with hooks adapted to engage over one edge of said base, bolt-holes provided in the other edge of said sections, bolts provided with hooks at one end adapted to be engaged over the other edge of said base, and to be secured within said bolt-holes, one or more angular sockets formed in the face of each section and adapted to lie against one face of said base, and rake-teeth having headed ends bent to fit said sockets, whereby they may be clamped in position between said sections and base, substantially as described.

4. In a rake-head, the combination of an angle-iron base, one or more anchoring-sections adapted to lie against one face of said base, hooks formed on said sections and adapted to engage over an edge of the base, means for clamping the sections in any desired lateral adjustment on said base, a series of tooth-sockets formed in the faces of said sections and adapted to hold a series of teeth nested in said sockets, substantially as described.

In testimony whereof I have hereunto set my hand.

SYLVESTER H. JONES.

Witnesses:

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