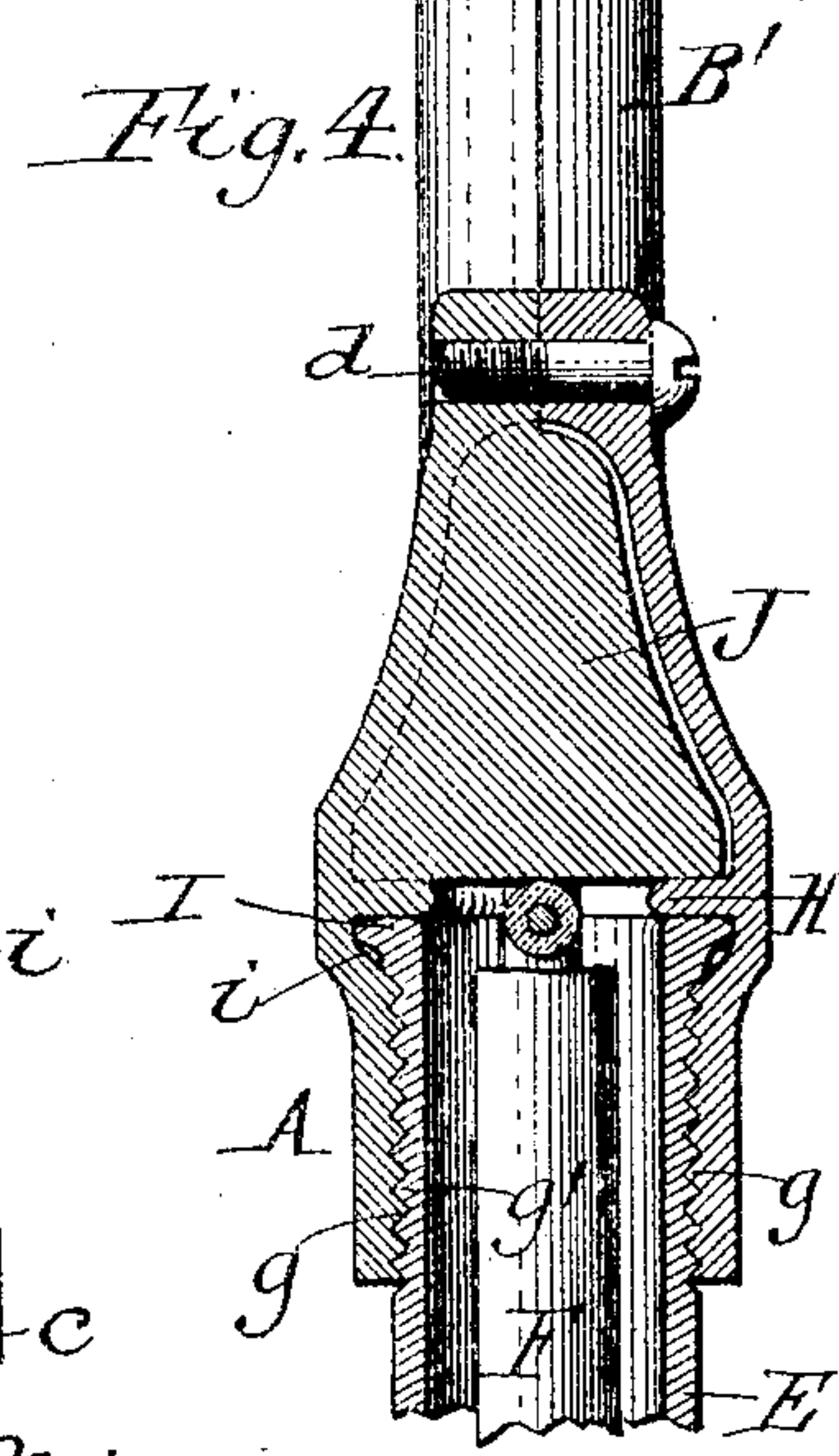
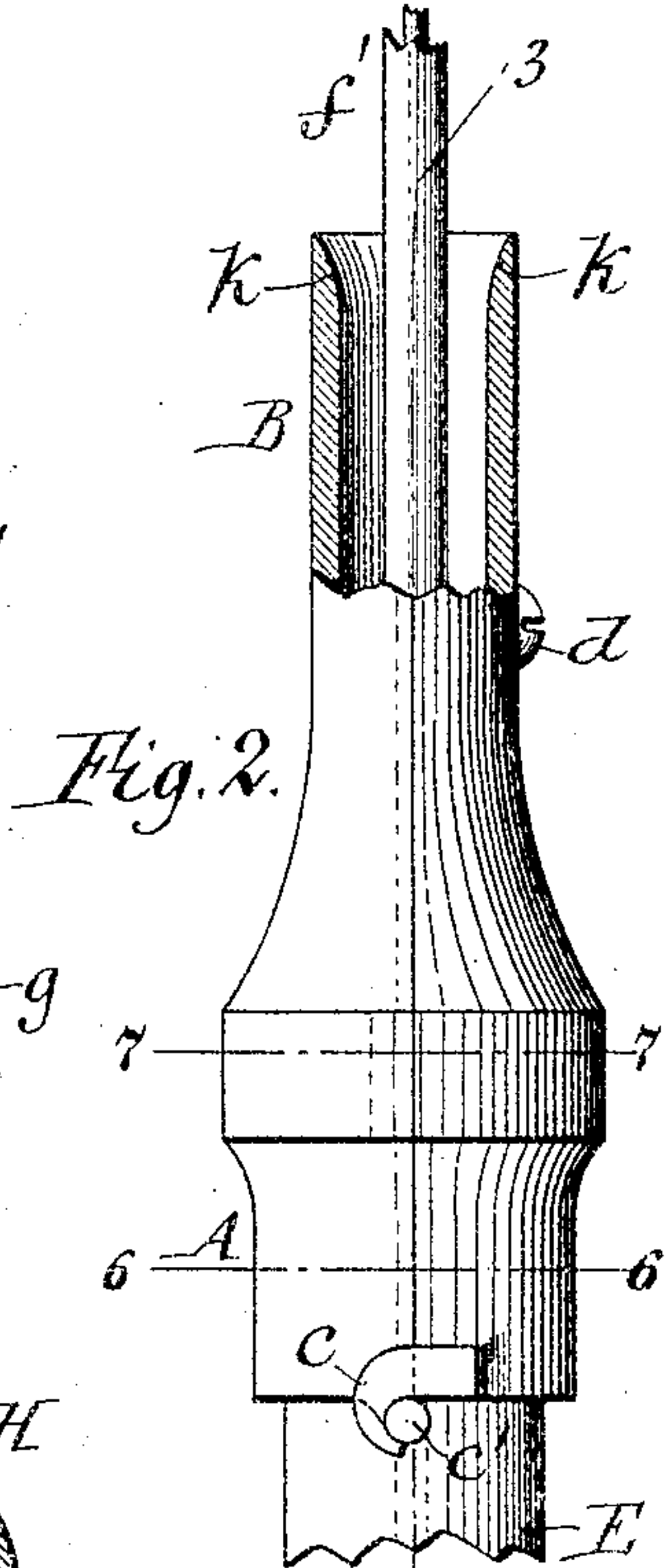
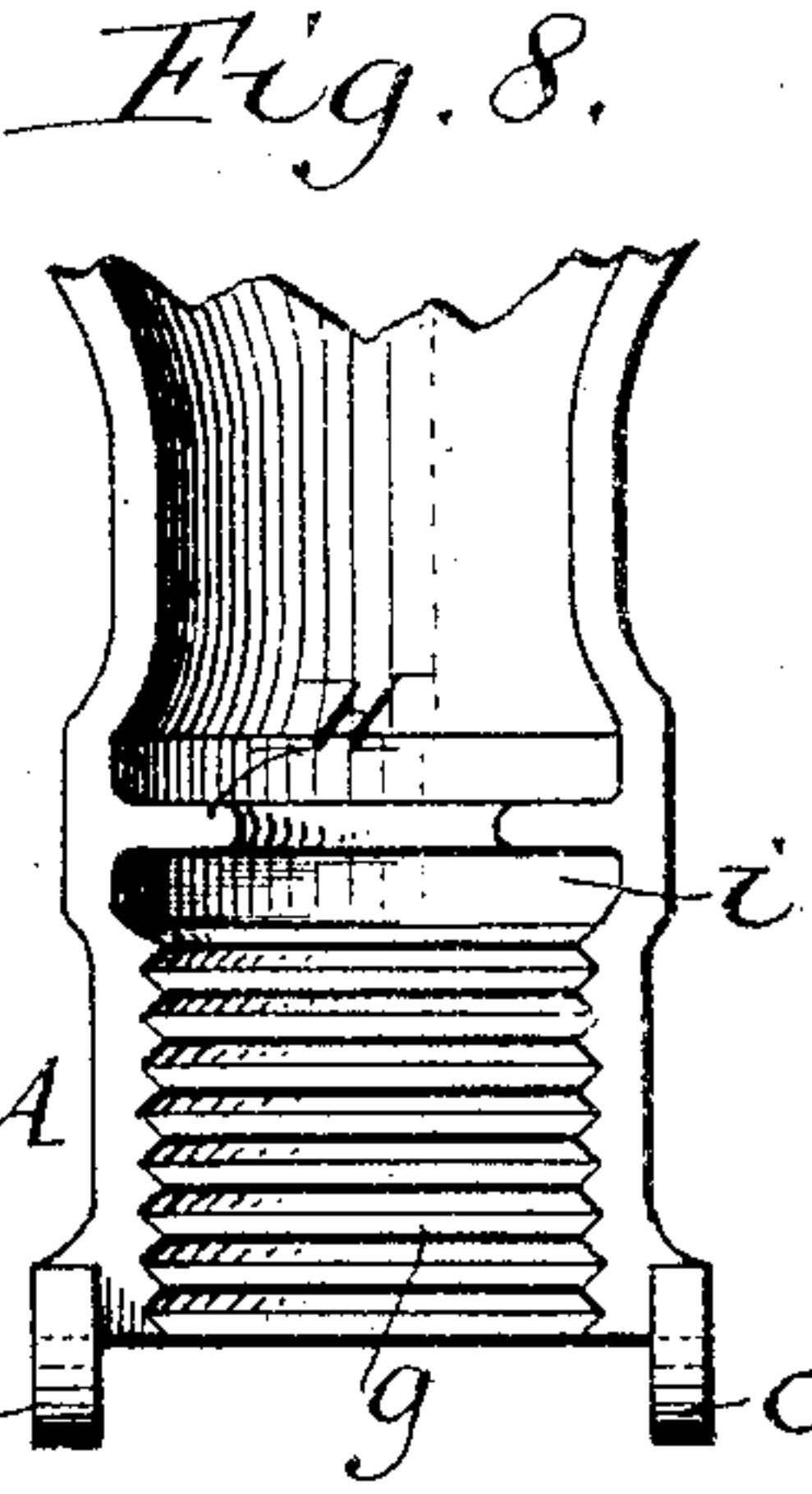
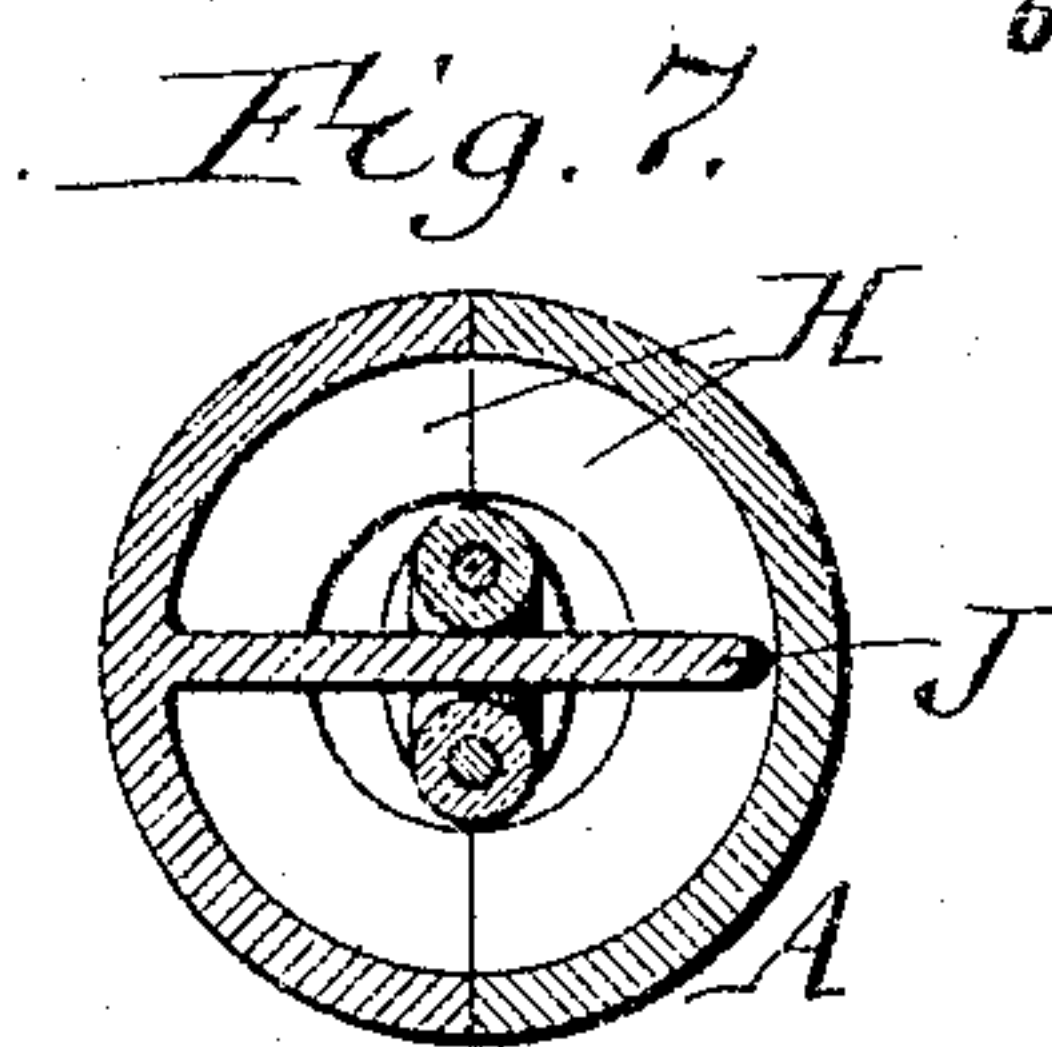
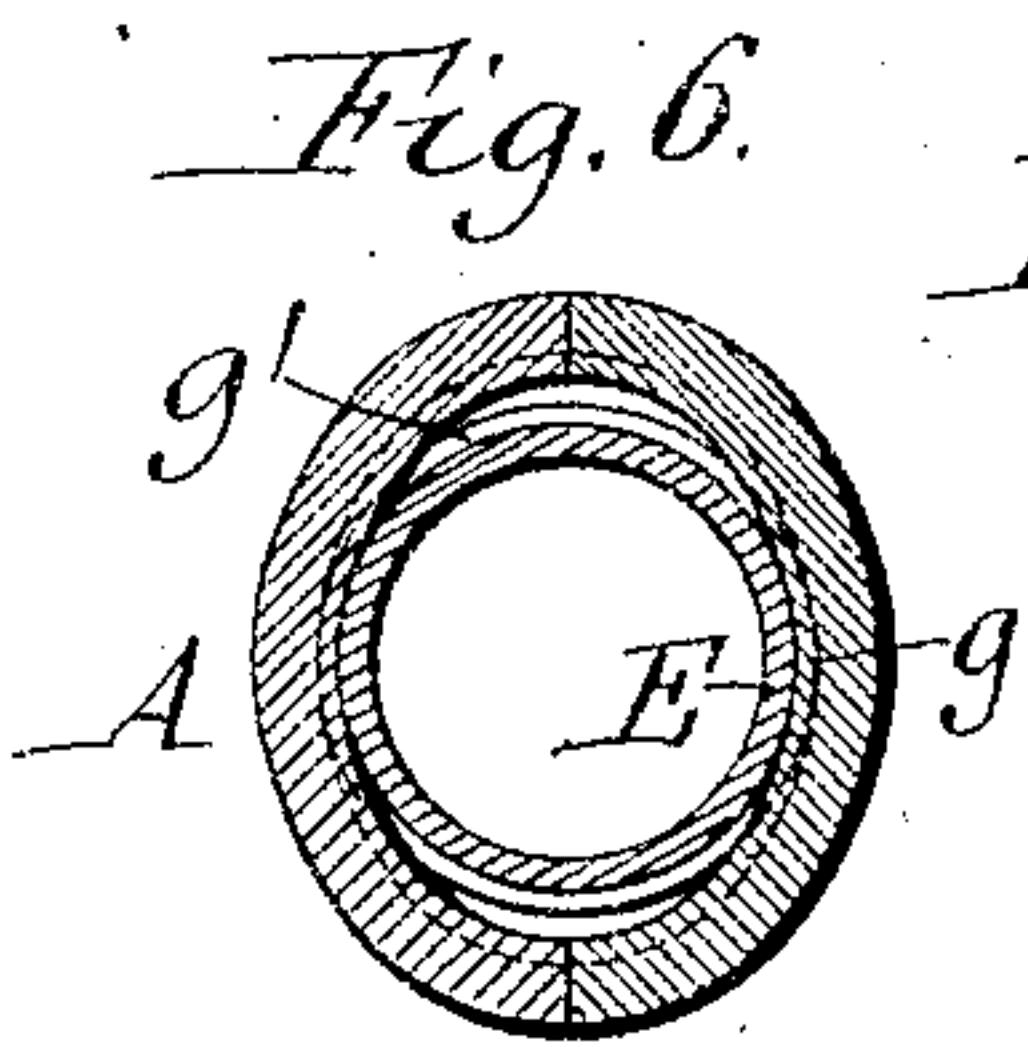
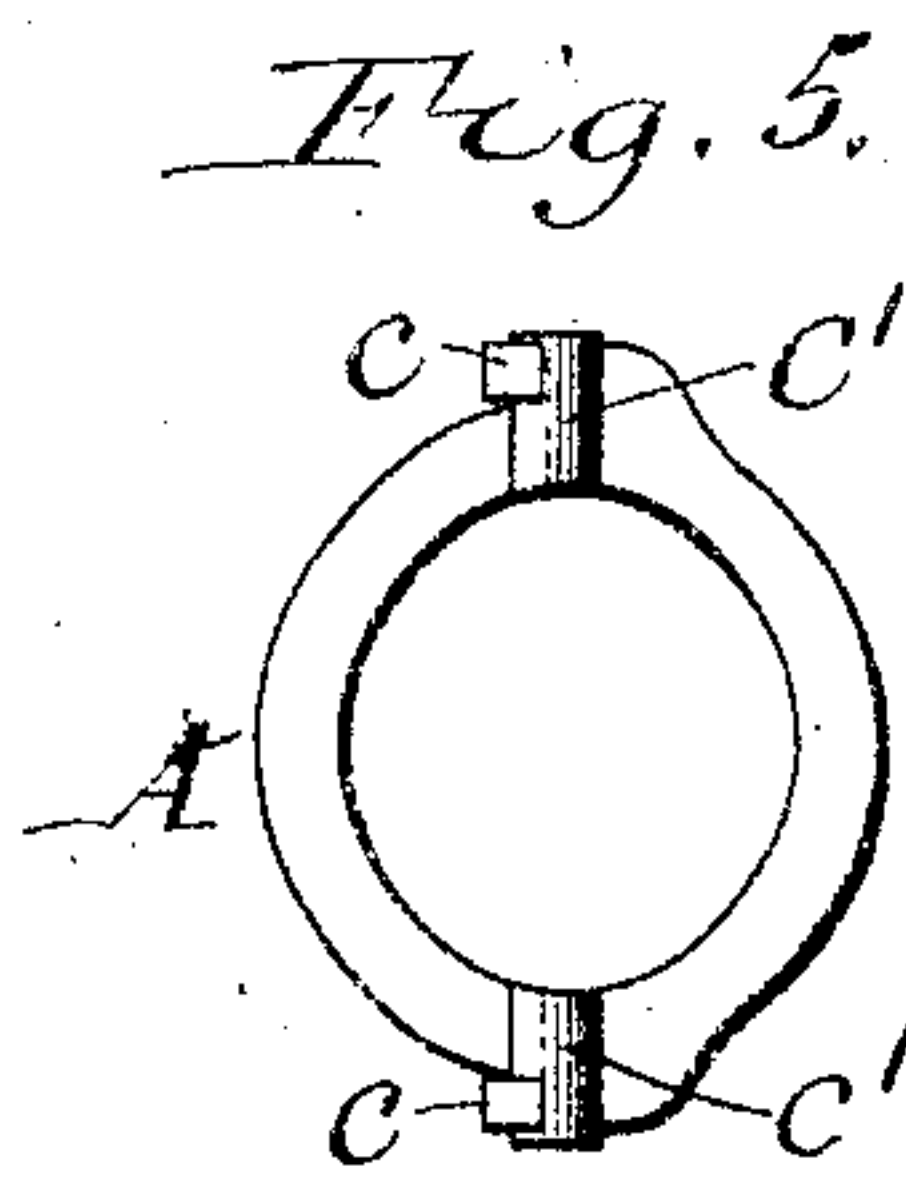
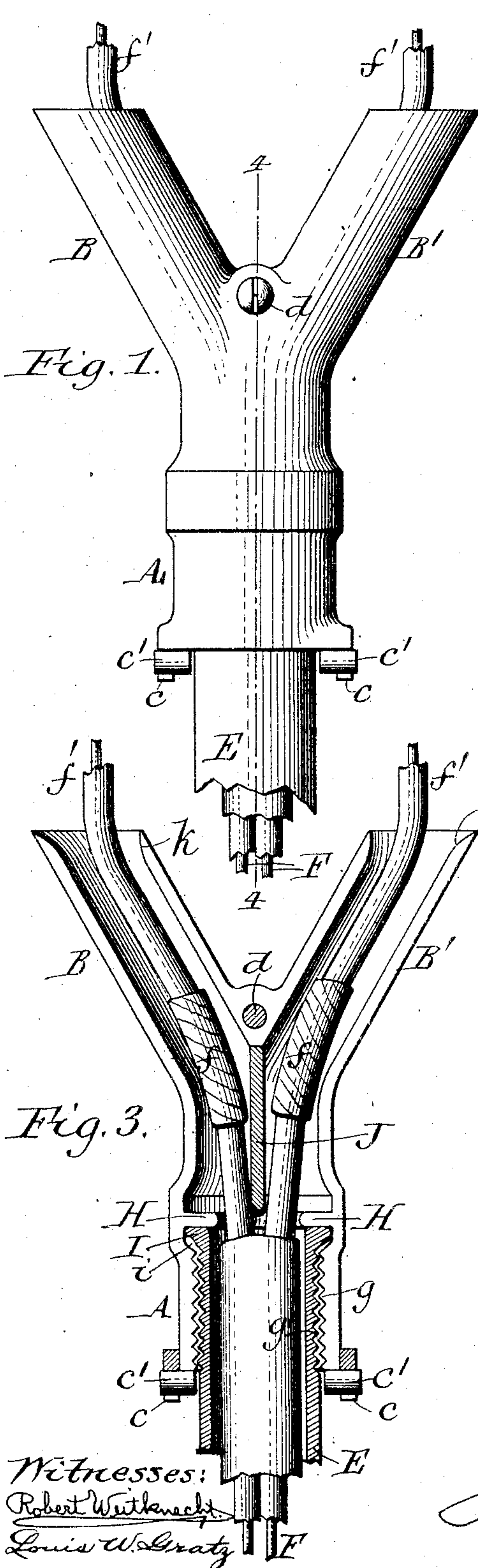


No. 786,911.

PATENTED APR. 11, 1905.

W. J. MILES & J. PATTERSON.  
ELECTRIC CONDUIT TERMINAL.

APPLICATION FILED JUNE 21, 1904.



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# UNITED STATES PATENT OFFICE.

WILLIAM J. MILES AND JESSE PATTERSON, OF BUFFALO, NEW YORK.

## ELECTRIC-CONDUIT TERMINAL.

SPECIFICATION forming part of Letters Patent No. 786,911, dated April 11, 1905.

Application filed June 21, 1904. Serial No. 213,503.

*To all whom it may concern:*

Be it known that we, WILLIAM J. MILES, a citizen of the United States, and JESSE PATTERSON, a subject of the King of England, both residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Electric-Conduit Terminals, of which the following is a specification.

In electric wiring it is compulsory to protect the wires and render the same safe against fire at the junction of the covered and uncovered parts of the wires or cables. The means heretofore employed at the termination of a conduit which inclosed the covered part of the wire are unsatisfactory owing to their cost, the difficulty of applying the same, and their bulky construction, which prevents making a neatly-finished job in many places.

It is the object of this invention to provide a terminal for this purpose which is simple and inexpensive in construction, easy of application, and neat in appearance.

In the accompanying drawings, Figure 1 is a front elevation of our improved terminal for electric conduits. Fig. 2 is a side elevation thereof, partly in section. Fig. 3 is a vertical section in line 3 3, Fig. 2. Fig. 4 is a vertical section in line 4 4, Fig. 1. Fig. 5 is a bottom plan view of the terminal. Figs. 6 and 7 are horizontal sections in lines 6 6 and 7 7, Fig. 2, respectively. Fig. 8 is a fragmentary inside elevation of one of the sections of the terminal.

Similar letters of reference indicate corresponding parts throughout the several views.

The body of the terminal consists of a main tube or trunk A and two separating tubes or branches B B', diverging from the upper end of the trunk. The body is divided centrally lengthwise through the trunk and both branches, so as to produce two substantially similar sections or members, each of which has the form of the letter Y. At its lower end one of the trunk-sections is provided on opposite sides with hooks c c, which engage with laterally-projecting pins c' c', arranged at the lower end of the other trunk-section on opposite sides thereof. At the crotch between the branches of the body the sections are connected by a screw d, passing loosely through

an opening in one of the sections and engaging a threaded opening in the other section, as shown in Fig. 4. Obviously a bolt or any other suitable fastening means may be substituted for the screw d.

E represents the main pipe or conduit, which has its end arranged in the lower part of the trunk of the terminal.

After the main wires F have been placed in the main conduit and connected by splicing f or otherwise with the branch wires f' f' the lower ends of the trunk-sections are placed against opposite sides of the end of the main conduit at such an angle to permit of interlocking their hooks and pins. The upper ends of the body-sections are now swung toward each other while one of the branch wires is confined in each branch tube or conduit, and then the sections of the body are connected by the screw d. In order to cause the trunk-sections to grip the main conduit, these sections are so constructed that together they form an oval, the major axis of which lies through the joint and is greater in length than the diameter of the main pipe, while its minor axis lies at right angles to the joint and is less in length than the diameter of the main pipe. Upon clamping the trunk-sections thus formed against opposite sides of the main pipe their central parts are spread or sprung outwardly in adapting themselves to the pipe. This spreading action of the trunk-sections is in the direction of the minor axis thereof, causing the same to contract in line with the major axis, enabling the sections to firmly grip the main pipe and also adapt themselves to any slight variations in the diameter of the main pipes.

For the purpose of positively interlocking the trunk-sections with the main pipe each of said sections is provided in its lower part with an internal series of transverse teeth, ribs, or corrugations g, which engage with an external screw-thread g' on the upper end of the main pipe.

If desired, the thread on the main pipe may be omitted, in which case the teeth or ribs by engaging the plain surface of the main pipe increase the grip on the same for firmly uniting the terminal and main pipe.

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H represents an internal annular stop or guard flange arranged circumferentially in the central part of the trunk and constructed in two cooperating semicircular sections, one of which is formed in each trunk-section, as shown in Fig. 7. This flange forms a stop which engages with the upper end of the main pipe and permits of properly gaging the terminal on the pipe. The flange H is preferably of such width that its inner edge extends inwardly beyond the bore of the main pipe and is rounded, as shown in Figs. 3 and 4. By this means the insulation of the wires in the main pipe is prevented from coming in contact with the bur, which is formed at the end of the main pipe in cutting the same, thereby avoiding the danger of cutting the insulation and grounding or short-circuiting the current, which is liable to set fire to adjacent woodwork or interfere with the electric system. Furthermore, the flange H dispenses with the usual separate insulating-bushing at the end of the main conduit.

Instead of employing the ribs and screw-threads of the trunk-sections and the main pipe the interlocking effect between these parts may be produced by forming an external annular flange I on the upper end of the main pipe and engaging the same with an internal annular groove  $i$  in the trunk of the body, which groove is preferably formed circumferentially below the flange H. Although either one of these interlocking means answers the purpose in most cases, they may both be used when greater security is required.

The splices  $f$  between the main wires F and the branch wires  $f'$  are preferably arranged at the junction of the trunk and the branches of the terminal, as shown in Fig. 3. It is customary in electrical work to coat the interior of the terminal with japan or other insulating material, so as to prevent metallic contact between any accidentally-exposed portion of the wires and the terminal.

In order to prevent the formation of an electric arc from the splice of one branch wire to the splice of the other branch wire in case of imperfect workmanship, a partition J is arranged between these splices. This partition, which is also coated with japan, extends lengthwise of the trunk from the crotch of the branches downwardly to the guard or stop flange H. The partition is preferably formed integrally with one of the terminal body-sections and extends transversely from the inner side or bore of one trunk-section to the inner side or bore of the other trunk-section, thereby crossing the joint between these sections, as shown in Fig. 4. The lower edge of the partition J is rounded, so as to prevent chafing of the insulation of the wiring. By thus forming the partition in one piece with one of the body-sections instead of dividing the partition in line with the joint between the same a more perfect separation between the

branch wires is produced and cutting edges incidental to a divided partition are avoided, thereby reducing to a minimum the liability of injuring the insulation and exposing the wires.

Each of the branch tubes has the upper end of its bore rounded or flared, as shown at  $k$ , Figs. 2 and 3, in order to prevent the insulation of the wire which engages the same from being worn off and exposing the wire.

By constructing the terminal in sections in the manner described it is possible to apply the same to the main conduit and branch wires after the splicing between the latter and the main wires has been effected, and it also permits of removing the terminal when access is desired to the splices without disturbing the latter, thereby expediting the installation of the wires and the maintenance of the same, as this can be done freely and without hindrance such as occurs when the splicing has to be done within the terminal, as heretofore practiced.

The upper or outlet ends of the branch tubes are spaced apart or separated the proper distance to prevent arcing across the branch wires, thereby avoiding the necessity of employing spacing-cleats or other devices immediately above the terminal for separating the branch wires the proper distance to meet the requirements of the fire-underwriters.

We claim as our invention—

1. An electric-conduit terminal comprising two similar members each having a trunk-section and two branch sections, pins arranged on one of said members, hooks arranged on the other member and engaging with said pins, and a fastening for connecting said members, substantially as set forth.

2. An electric-conduit terminal comprising two similar members each having a trunk-section and two branch sections, a hook arranged on one trunk-section and engaging with a pin on the other trunk-section, and a fastening connecting said members at the crotch between said branches, substantially as set forth.

3. An electric-conduit terminal comprising two similar members each having a trunk-section and two branch sections, pins arranged at the lower end of one trunk-section on opposite sides thereof, hooks arranged at the lower end of the other trunk-section on opposite sides thereof and engaging with said pins, and a screw connecting said members at the crotch between said branches, substantially as set forth.

4. An electric-terminal conduit comprising two similar members each having a trunk-section, two branch sections, a circumferential flange-section arranged centrally in the bore of the trunk-section, a series of transverse ribs in the bore of the trunk-section below said flange, a central partition extending lengthwise from the crotch between said branches to said flanges and transversely from

the bore of one trunk-section to the bore of  
the other trunk-section, pins arranged on one  
trunk-section, hooks arranged on the other  
trunk-section and engaging with said pins,  
5 and a screw connecting said members at the  
crotch between said branch sections, substan-  
tially as set forth.

Witness our hands this 18th day of June,  
1904.

WILLIAM J. MILES.  
JESSE PATTERSON.

Witnesses:

THEO. L. POPP,  
E. M. GRAHAM.