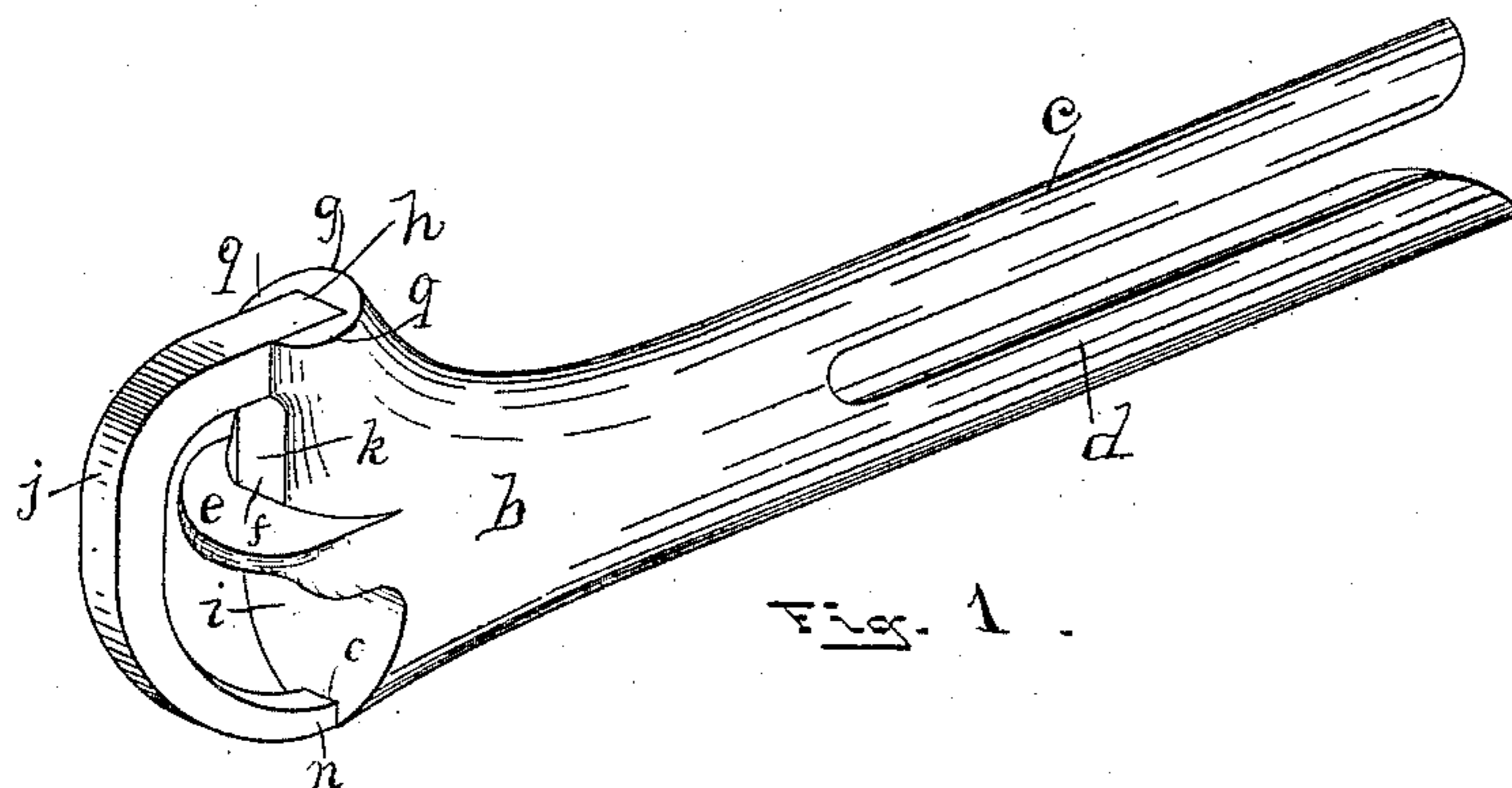
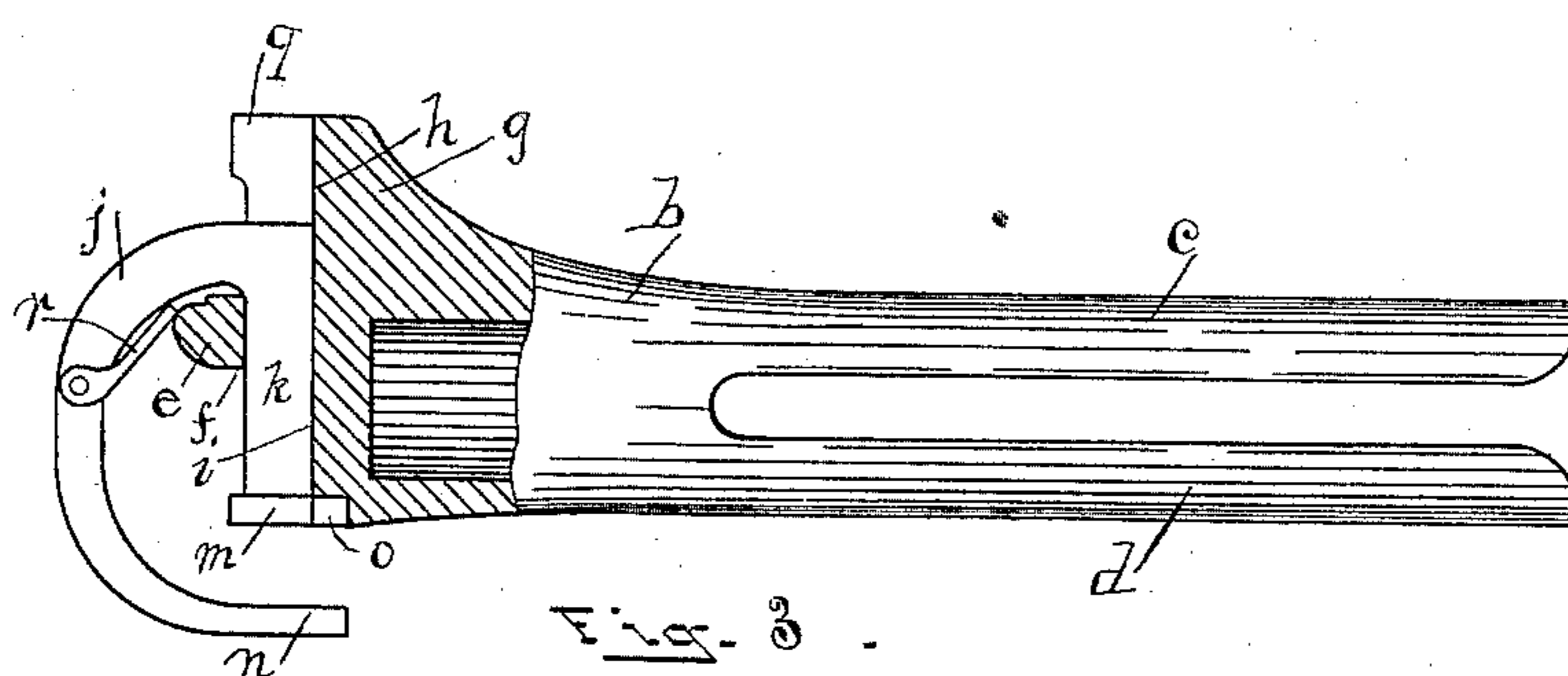
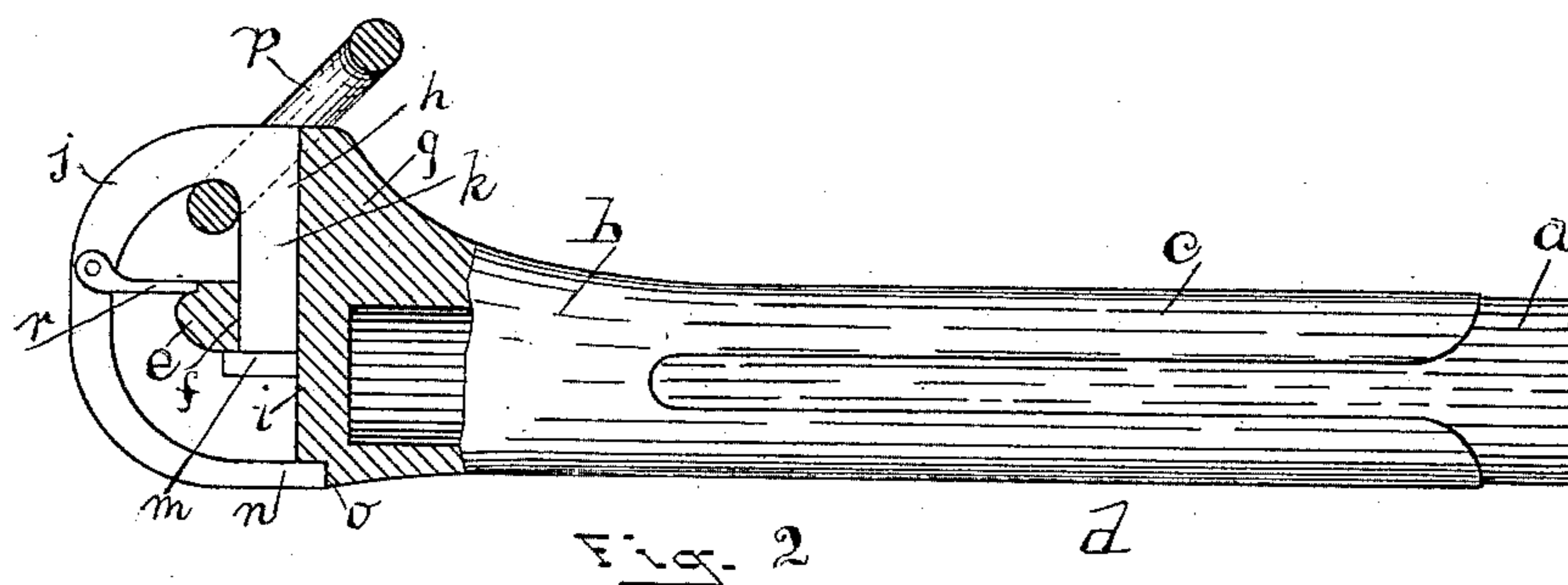


(No Model.)

W. CHATTERSON.
TONGUE TIP FOR VEHICLES.

No. 396,683.

Patented Jan. 22, 1889.



ATTEST

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TONGUE-TIP FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 396,683, dated January 22, 1889.

Application filed June 28, 1888. Serial No. 278,419. (No model.)

To all whom it may concern:

Be it known that I, WRIGHT CHATTERSON, a citizen of Canada, residing at Portsmouth, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Tongue-Tips for Vehicles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in tips for the ends of vehicle-tongues; and it consists, chiefly, in the combination, construction, and arrangement of the parts which form the device, as I hereinafter fully describe, and specifically point out in the claims; and this application is a continuation of and embodies the novel features shown and set forth in my former application, filed October 29, 1887, Serial No. 253,694, and allowed December 1, 1887; and one object of my invention is to produce a tongue-tip which may be easily engaged with the ring of the neck-yoke, and will securely hold the neck-yoke in position without liability of disengagement therefrom; and another object of this invention is to produce a tongue-tip which will be so arranged that the check-lines upon the harness cannot be caught and held beneath the tip, which often occurs with the form of tongue-tips in common use. I attain these objects by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of my improved tongue-tip. Fig. 2 is a longitudinal vertical section of the same in a closed position, as when engaged with the neck-yoke ring. Fig. 3 is the same view showing the parts in position when the neck-yoke is disengaged.

a represents a wagon-tongue, and *b* is a socket which is passed over the end of the tongue and is provided with the rearward-extending upper and lower parts, *c* and *d*, which are secured to the tongue. The forward end

of the socket *b* is closed, and is provided with a portion, *e*, which projects forward from the end, and is provided with a vertical rectangular opening, *f*. The dimension through from top to bottom of the projecting portion *e* is considerably less than the vertical dimension of the socket *b*, which is also provided with an upwardly-extending portion, *g*, so that shoulders *h* above and *i* below the portion *e* are formed, and the rear wall of the opening *f* is arranged to coincide with the faces of the shoulders *h* and *i*.

g are supporting portions which project forward from the shoulder *h*, and are arranged with their inner faces coincident with the side walls of the opening *f*.

j is a curved hook provided with a straight shank, *k*, of rectangular form, and passed through the opening *f*, and of a size to slide easily in the opening and rest on its rear side against the shoulder *h* of the portion *g*, and with its lateral sides between and supported by the portions *g*.

The lower end of the shank *k* is provided with an enlarged portion or head, *m*, and the opposite or free end, *n*, of the hook is arranged to pass into a notch, *o*, in the base of the socket, and the curve of the hook is adjusted so that when the head *m* rests against the under side of the portion *e* the end *n* will rest in the notch *o*.

The operation of the device is, that when the tongue is raised from the ground the shank *k* slides downward through the opening *f* until the curved portion of the hook *j* rests upon the upper side of the projecting portion *e*. The end *n* is then considerably below the under side of the piece *b*, and the neck-yoke ring *p* may then be passed over the end of the hook *j*, and upon the tongue being released the weight is then sustained by the shank *k*, resting upon the ring *p*, which raises the shank *k* in the opening *f* until the head *m* rests against the under side of the projection *e* and the end *n* rests within the notch *o*, which firmly and securely supports the hook in position so long as the weight of the tongue rests upon the ring *p*, and also entirely prevents the accidental disengagement

of the tongue from the neck-yoke from any cause, and allows the neck-yoke to be easily detached by relieving the hook *j* from the weight of the tongue, when the shank *k* at once slides downward, and the ring *p* may then be disengaged from the hook, which is free from the notch *o*.

In some cases the tongue is supported in other ways than by the neck-yoke, and no weight of the tongue being upon the neck-yoke allows the hook *j* to slide downward and permits the ring *p* to become disengaged from the hook, and for use in these cases a pawl, *r*, is pivoted to the ring *p* in such a position that the free end of this pawl rests upon the outer end of the portion *e*, so that when the ring *p* is passed upon the hook for engagement therewith the free end of the pawl is lifted and the ring allowed to pass over the pawl, which then drops to its former position again, and the ring is then retained against disengagement from the hook until the pawl is lifted, and the pawl being lifted allows the ring to be passed over the pawl and from the hook, as before explained.

As shown in Figs. 2 and 3, the position of the hook in no way interferes with the operation of the pawl, as the free end of the pawl rests upon the outer end of the portion *e*, in whatever position the ring may be. The portions *q* upon each side of the vertical portion *k* of the hook add greatly to the strength thereof by supporting the hook against the strain occasioned by a lateral movement of the tongue, and also provides a greater wearing-surface for the neck-yoke ring and relieves the hook from a great portion of the strain when the vehicle is held backward by the team. This device also prevents the check-line of the harness from catching over the end of the tongue, as is a very common occurrence with the ordinary neck-yoke attachment to the tongue, and which is a great source of annoyance and trouble, as it is impossible to detach the line, when caught under the end of the projecting tongue, without passing to the front of the horses and using the hand for releasing the check-line.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a vehicle-tongue and a socket upon the end of the tongue having a forwardly-projecting portion, *e*, provided with an opening, *f*, of a hook, *j*, having a shank, *k*, passed through the opening *f*, and provided with a head, *m*, substantially as and for the purpose set forth.

2. The combination, with a vehicle-tongue, of a socket, *b*, provided with an upwardly-extending brace portion, *g*, and a forwardly-projecting portion, *e*, having an opening, *f*, and a curved hook, *j*, having a straight portion, *k*, passed through the said opening *f* and provided with a head, *m*, substantially as and for the purpose set forth.

3. The combination, with a vehicle-tongue and a socket, *b*, provided with a forwardly-projecting portion, *e*, having an opening, *f*, and with an upwardly-projecting brace portion, *g*, and the curved hook *j*, having a straight portion, *k*, passed through the said opening *f* and provided with the head *m*, of the supporting portions *q*, extending forwardly from the brace portion *g* upon each side of the said portion *k* of the hook, substantially as and for the purpose set forth.

4. The combination, with a vehicle-tongue, a socket, *b*, provided with an upwardly-extending brace portion, *g*, and a forwardly-projecting portion, *e*, having a vertical opening, *f*, and a curved hook, *j*, having a straight portion, *k*, passed through the said opening *f*, and a head, *m*, of a pawl, *r*, pivoted to the curved portion of the said hook and with its inner free end resting upon the projecting portion *e*, substantially as and for the purpose set forth.

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

WRIGHT CHATTERSON.

Witnesses:

JAS. E. THOMAS,
W. H. POWER.