

No. 659,909.

Patented Oct. 16, 1900.

T. A. BAKKEN.
TRACE HOOK AND GUARD.

(Application filed Mar. 14, 1900.)

(No Model.)

Fig. 1.

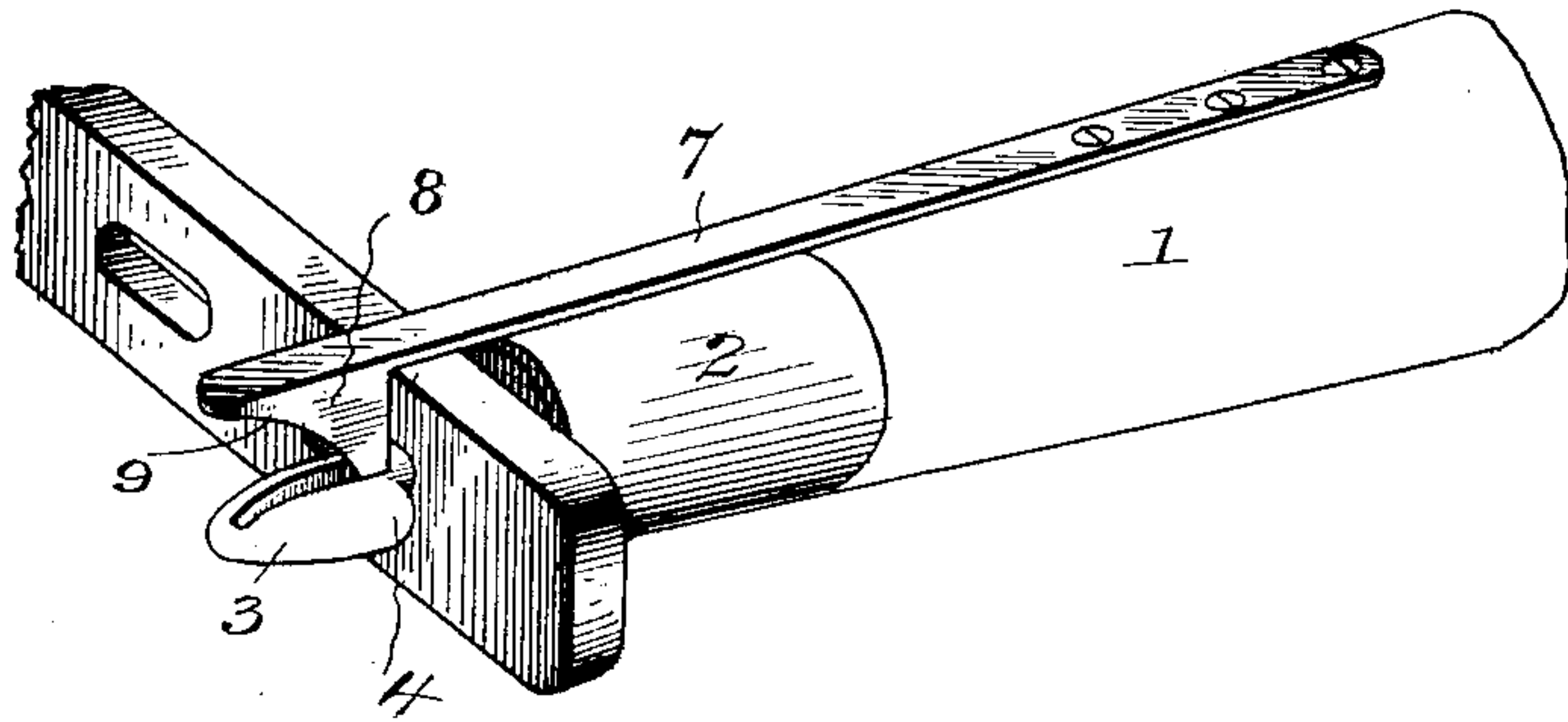


Fig. 2.

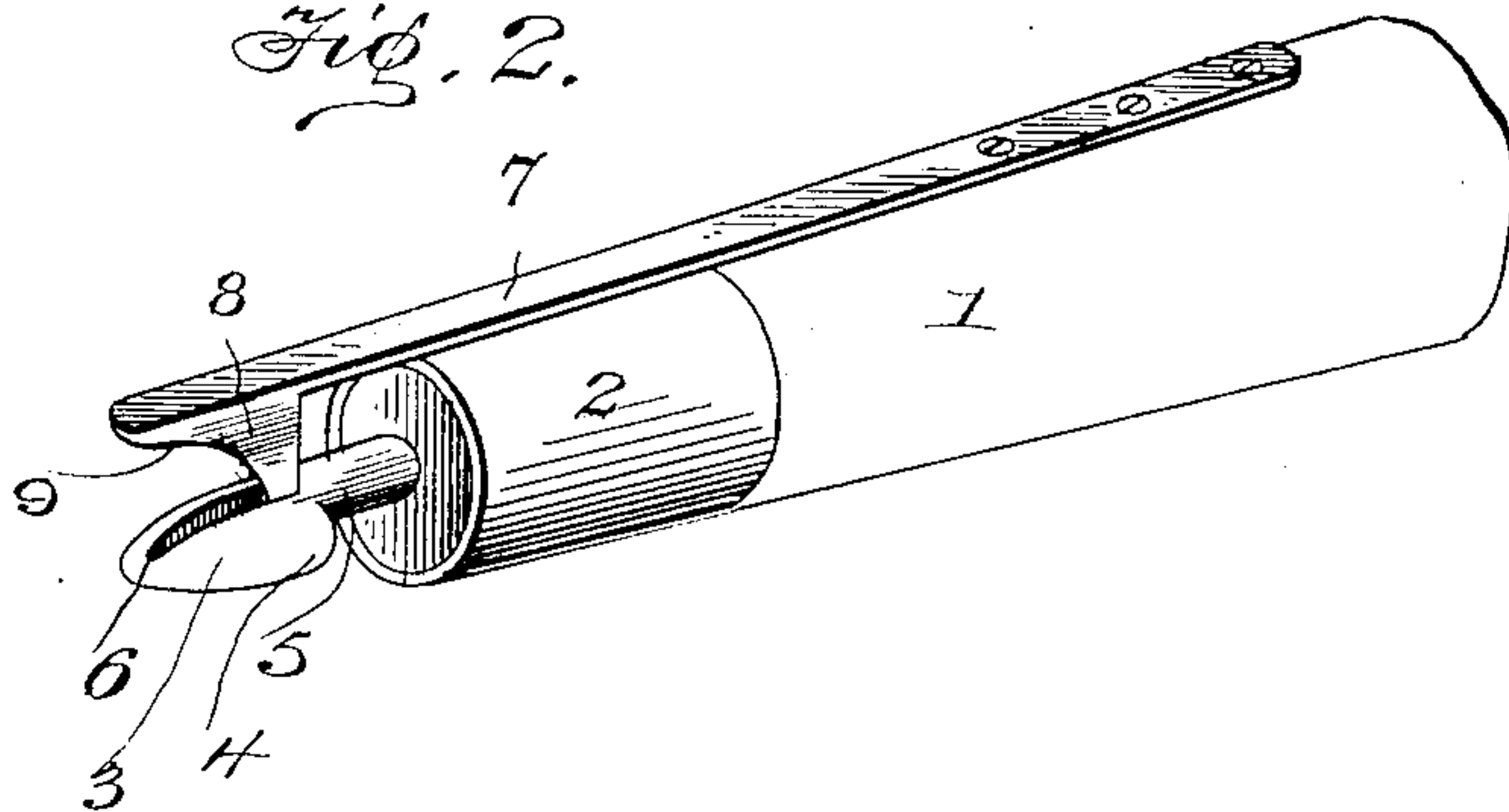
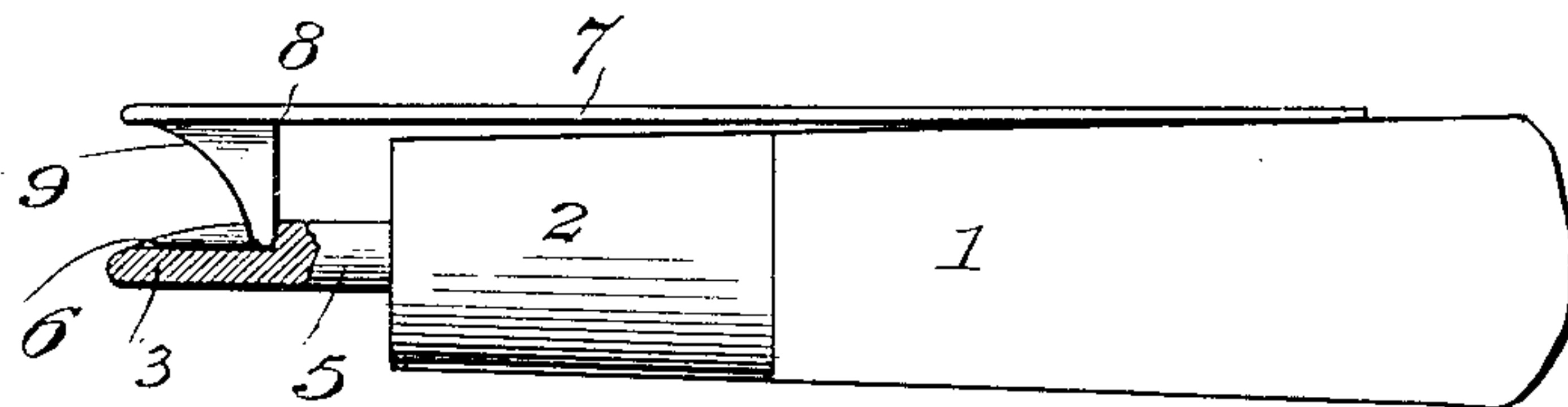


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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TRACE HOOK AND GUARD.

SPECIFICATION forming part of Letters Patent No. 659,909, dated October 16, 1900.

Application filed March 14, 1900. Serial No. 8,631. (No model.)

To all whom it may concern:

Be it known that I, THORE A. BAKKEN, a citizen of the United States, residing at De Soto, in the county of Vernon and State of Wisconsin, have invented certain new and useful Improvements in Trace Hooks and Guards; and I do hereby 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.

My invention relates to a combined whiffletree-hook and trace-fastener; and it consists of a whiffletree-hook of peculiar construction and a spring-actuated lock or guard for the trace, which is automatic in its action and is so constructed and arranged that in applying the end of the trace over the hook of the whiffletree the spring guard or lock will be automatically raised and the trace secured in position without the operator having to raise said lock or guard.

The object of my invention is the production of a whiffletree-hook and trace-guard which is exceedingly simple in its construction and operation and yet very effective, the guard or lock of which will act automatically in securing the trace in place when the same is applied over the hook or engaging end of the whiffletree.

In the accompanying drawings, Figure 1 is a perspective view of one end of a whiffletree, showing the manner of securing a trace in position on the same in connection with my improved hook and lock. Fig. 2 is a similar view with the trace removed; and Fig. 3 is a side elevation, partly in section, of the same.

1 in the drawings represents a whiffletree which is of ordinary construction and which is provided with the usual strengthening end band 2. The whiffletree is provided on each end with a hook or engaging end, as 3, which latter is provided with a head, as 4, and a reduced portion or shank, as 5. The head of the hook or engaging portion is provided on its upper surface with a longitudinal groove 6 of considerable depth to receive and retain the end or nose of a spring lock or guard 7, as will be hereinafter described. By making the groove or depression 6 comparatively deep a positive lock is secured for the end of

the spring to guard against accidental lateral movement, but without interfering with the vertical movement of said lock or guard. The front edge of the hook or engaging end 3 is preferably made straight, and the rear edge of the hook is provided with a depression formed by reducing the said hook, as at 5, so that an engaging seat is secured for the trace. The head of the trace-hook or engaging end 3 is rounded or tapered off, so as to facilitate the applying or removal of the trace.

7 in the drawings represents a spring-actuated lock or guard which is constructed of a single piece or strip of spring metal and is suitably secured at its inner end to the whiffletree and is free at its outer end. This guard or lock 7 is formed with a head 8, which is beveled on its outer under side, as at 9, to form an entrance for the insertion of the trace, the said guard or lock 7 being automatically raised in the act of applying the trace to the hook or engaging end of the whiffletree. I regard this as an important feature of my invention, as it enables the trace to be automatically applied without requiring the operator to lift the lock or guard in applying the trace to the end of the whiffletree.

Another important feature of my invention is the fact that the guard or lock 7 is itself a spring and does not require any auxiliary spring for its operation, and, furthermore, that it is constructed of a single piece of material, which makes it very cheap, simple, and effective and not liable to get out of order or the parts to become disarranged or lost.

Another important feature of my invention is the provision of a vertically-acting spring guard or lock provided with an engaging head, which is beveled on its under outer side to form a tapering entrance for the trace, the lower end or nose of said head engaging a recess or depression formed in the hook or engaging end of the whiffletree and a space being provided back of the head of the spring guard or lock for the reception of the trace.

Another feature of my invention is that by reason of the peculiar shape and construction of the hook and guard a trace can be fastened or hooked on without backing the horse to get the traces slack while they are being

fastened on the whiffletree, and the traces can be unfastened while the horse is pulling on them, thus rendering the fastening and unfastening of the traces much quicker and easier and saving much time and trouble, and also obviating the cutting of the traces at times.

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

1. A whiffletree hook and guard comprising a hooked or engaging end provided on the end of the whiffletree in combination with a spring lock or guard consisting of a single flat spring-strip secured at its inner end to the whiffletree, and its outer end left free and provided with a comparatively large solid head which is beveled inwardly on its under side so as to leave a comparatively large entrance-space for the introduction and passage of a trace, the construction and arrangement being such that the spring lock or guard will be automatically lifted as the trace is applied over the engaging end of the whiffletree and will automatically return to a locked condition in front of the trace, the trace bearing

upon the rear side of the head of the guard, substantially as described.

2. A whiffletree hook and guard comprising a hooked or engaging end provided on the whiffletree, and formed with a depression, in combination with a spring lock or guard consisting of a single flat strip secured at its inner end to the whiffletree, and its outer end left free and provided with an engaging head which is beveled inwardly on its under side, the construction and arrangement being such that the lower end of the head of the spring-lock will rest in the depression of the hook or engaging end of the whiffletree, which lock will be automatically raised in the act of applying the trace and will automatically return to a locked condition after the trace is in position on the end of the whiffletree, substantially as described.

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

THORE A. BAKKEN.

Witnesses:

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W. T. NOTTINGHAM.