

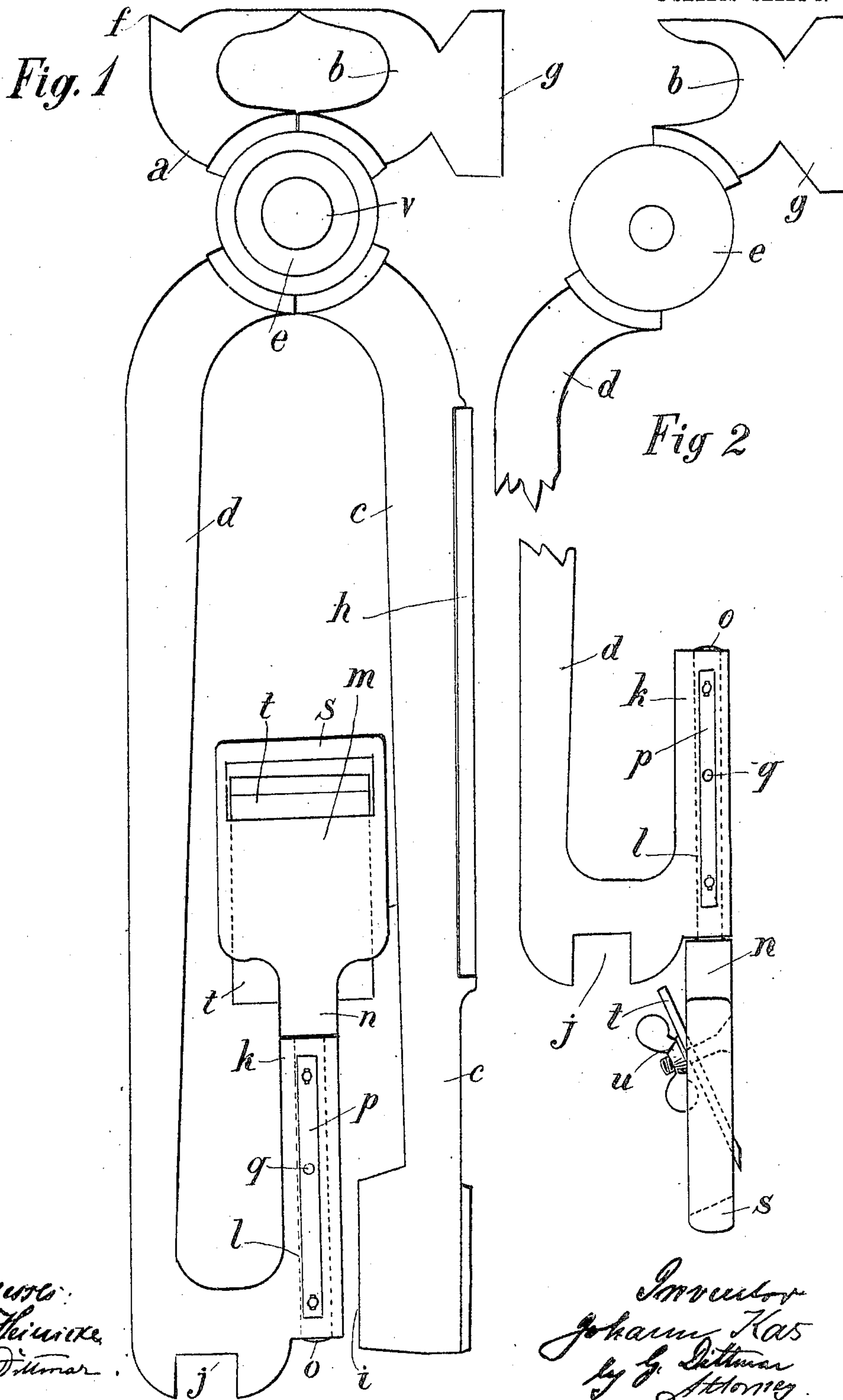
No. 812,750.

PATENTED FEB. 13, 1906.

J. KAS.
FARRIER'S TOOL.

APPLICATION FILED JUNE 21, 1904.

2 SHEETS—SHEET 1.



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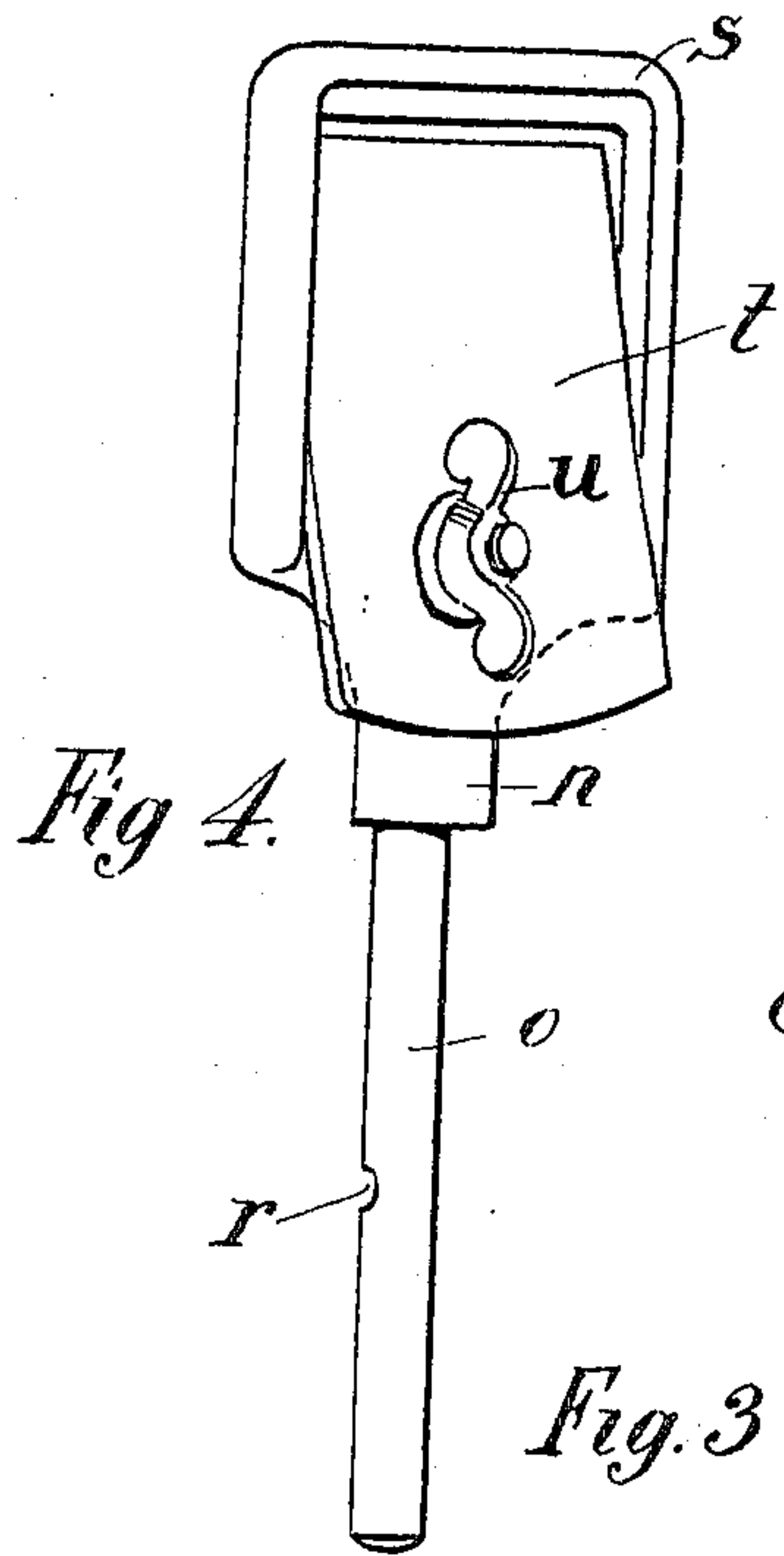


Fig. 4.

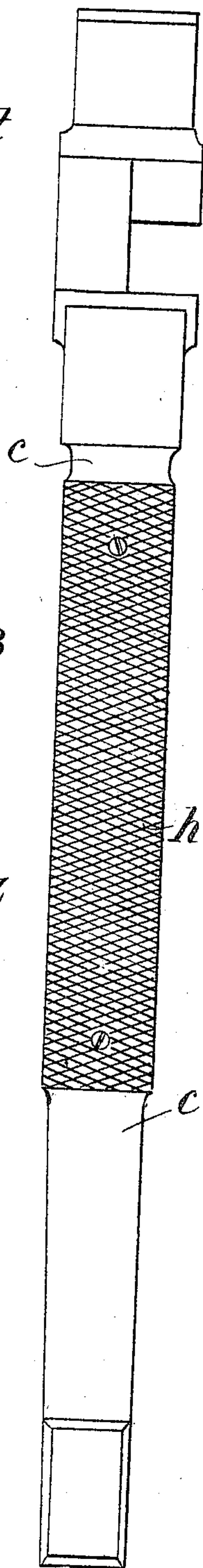


Fig. 3

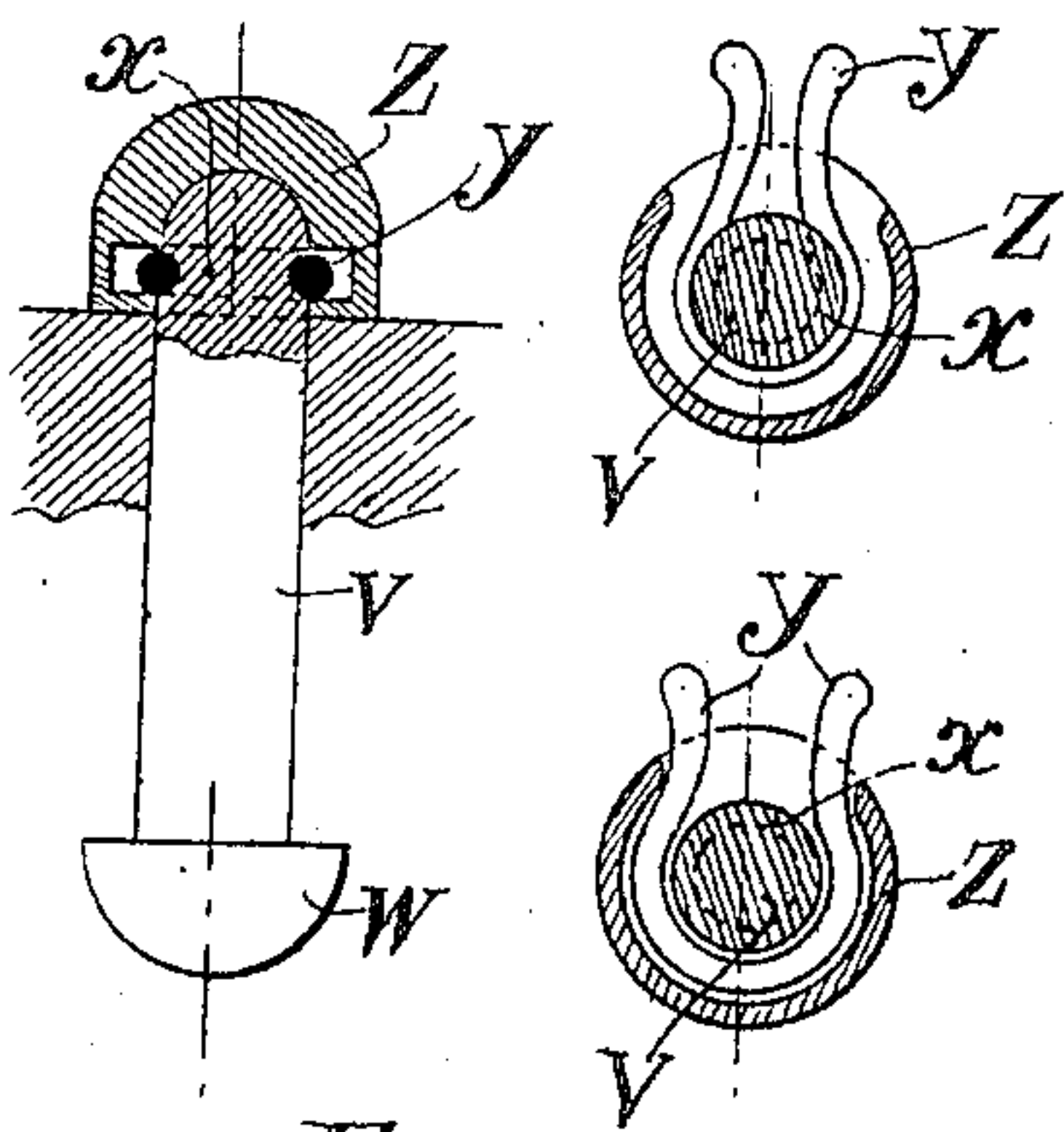


Fig 5

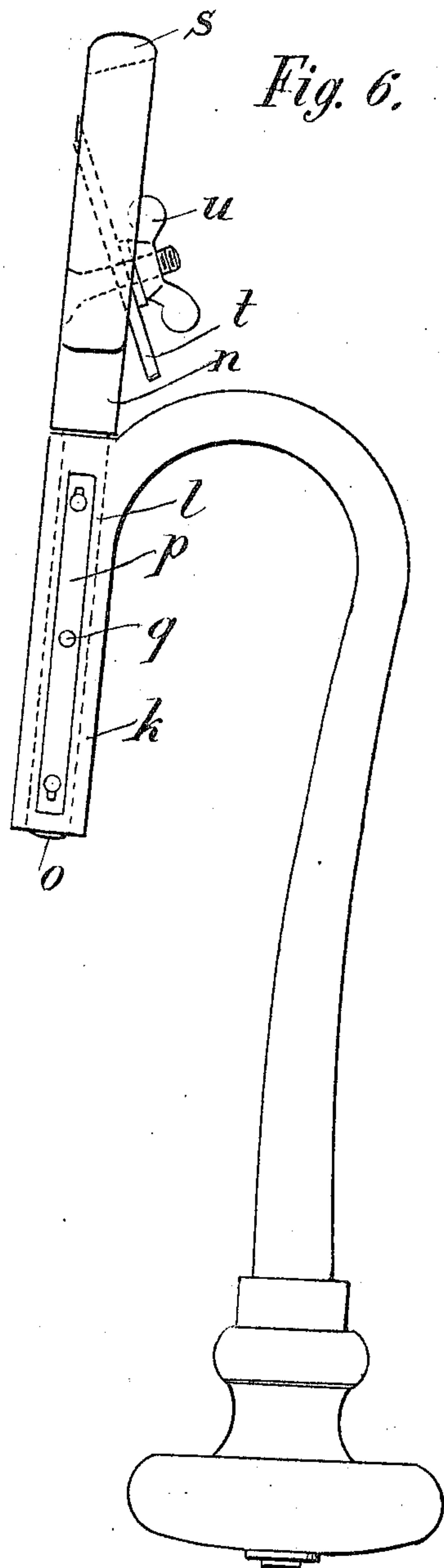


Fig. 6.

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UNITED STATES PATENT OFFICE.

JOHANN KAS, OF ASCH, AUSTRIA-HUNGARY.

FARRIER'S TOOL.

No. 812,750.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed June 21, 1904. Serial No. 213,531.

To all whom it may concern:

Be it known that I, JOHANN KAS, a subject of the Emperor of Austria-Hungary, residing at Asch, Bohemia, in the Empire of Austria-Hungary, have invented certain new and useful Farriers' Tools, (for which I have applied for a patent in France, dated March 12, 1904; in Great Britain, No. 7,122, dated March 24, 1904; in Switzerland, dated March 19, 1904; in Belgium, dated March 14, 1904; in Austria-Hungary, dated February 28, 1904, and in Germany, dated February 29, 1904;) 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.

This invention has for its object an improved combination-tool comprising all the accessory tools required for shoeing horses, as well as a key or spanner for manipulating ice-calks or frost-nails.

In blacksmiths' forges where the workmen have always the tools necessary for their work this new combination-tool could not render any appreciable service, and it has, however, been more particularly devised to form a portable set of tools in order that coachmen, riders, &c., may always have at their disposal and in a small compass all the tools required in case of accidents which may occur to the shoes of horses on a journey.

This tool is very useful for army purposes, for in actual practice it is necessary to carry tool-bags weighing several kilograms, which are liable to be lost. The improved tool arranged in a case or sheath of leather can be easily carried. It reduces the weight which the horse has to carry, and, moreover, the soldier has always at hand the tools necessary for keeping the shoes of his horse in good condition.

The accompanying drawings show, by way of example, different views of my improved combination-tool.

Figure 1 is a front elevation of the tool forming the object of this invention. Fig 2 shows one of the legs of the apparatus mounted so as to serve as a hammer and as a hoof-trimmer. Fig. 3 shows the opposite leg in side elevation. Fig. 4 shows the hoof-trimmer. Fig. 5 illustrates the device for securing the joint-pin. Fig. 6 shows the hoof-trimmer fixed in a suitable handle.

Referring to Fig. 1, the tool has the jaws *a* *b* of a pair of pincers mounted on the legs *c* *d*,

which are united by a joint *e* and pivot *v*. The jaw *a* is provided with a sharp edge *f*, which serves as a point of support when driving the nails in such a manner that the nails are clenched as soon as they are driven in. The jaw *b* bears a hammer *g*.

On the leg *c* is fixed, by means of screws, a file *h*, arranged in a recess. This file serves to cut off the nails which project or to even the hoof or shoe after the cutting off. At the extremity of this leg is a cutting-tool or chisel *i*, which serves to raise or release the riveted parts of the nails. The cutting edge of this chisel is directed toward the interior of the tool.

The leg *d* has a recess *j*, serving as a wrench for manipulating ice-calks or frost-nails. It is prolonged by a parallel part *k*, provided with a hole or socket *l*, serving to receive the hoof-trimmer *m* either in one direction or the other, accordingly as the hoof-trimmer is in use or not.

During the transport of the tool or when it is not in use the hoof-trimmer *m* is placed flat between the legs *c* *d*. (See Fig. 1.) In order to use it, it is withdrawn from the support *k* and is replaced in the opposite end of this support, as shown in Fig. 2, taking care to put the blade transversely relatively to the leg *d*, which is then separated from the leg *c* by removing the pivot *v*.

The hoof-trimmer *m* (shown in Fig. 4) is formed of a piece *n*, provided with an extension or stem *o*, fitting into the hole or socket *l* in the support *k* of the leg *d* for fixing the hoof-trimmer, which is secured by a flat spring *p*, fixed to the support *k* and provided with a catch *q* for entering a recess *r* in the extension *o*. The body *n* is extended by a widened part, forming a guard-frame *s* for the blade *t*, which is arranged like the "iron" of a plane—that is to say, obliquely. The position of the cutting edge of this blade is regulated by means of a screw and nut *u* in such a manner that the blade *t* can only project to the desired distance beyond the frame in such a manner that during use the blade cannot wound either the horse or the attendant by reason of any accidental slips which may occur. The hoof-trimmer can also be fixed on an ordinary frame, as shown in Fig. 6. For this purpose it is fixed either by means of a screw, a rivet, or by any other suitable means.

The pivot-pin *v* is shown separately in elevation and in two cross-sections by Fig. 5. It has a round head at one end, while the op-

posite end is rounded and is provided with a groove or neck *x* for receiving a spring *y*, arranged in a cap *z* in such a manner that by simple pressure of the finger the cap *z* may be separated from the pin *v* in order to permit the separation or connection of the two parts of the tool, according to the use which it is desired to make of it.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A tool of the character described, comprising handles pivotally connected at one end, one of said handles being formed at its opposite end with an extension projecting inwardly between the handles and having a bore extending therethrough, a reversible implement provided with a stem adapted to be fitted into the bore from either end there-

of, and means upon said extension for engaging the stem and securing the implement in either of its adjusted positions, substantially as described.

2. In a horseshoer's tool, a handle provided at one end with a tool-supporting extension projecting rearwardly therefrom parallel with the handle and having a bore extending therethrough, a reversible implement provided with a stem adapted to be fitted into the bore from either end thereof, and means upon said extension for engaging the stem and securing the implement in either of its adjusted positions, substantially as described.

In testimony whereof I affix my signature.
JOHANN KAS.

In presence of—

THEODORE REDIG,
GEORGES VILLEBESSEYR.