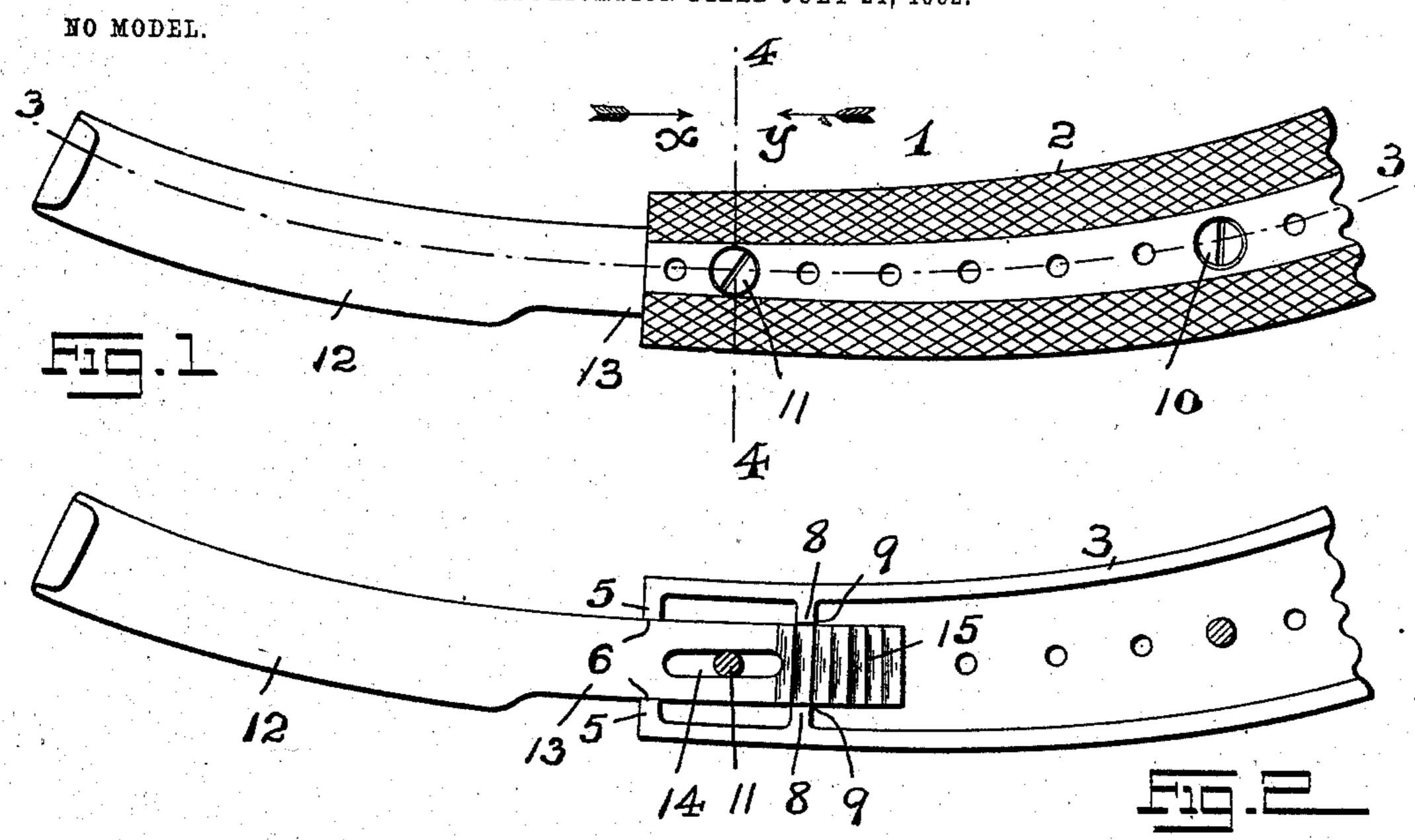
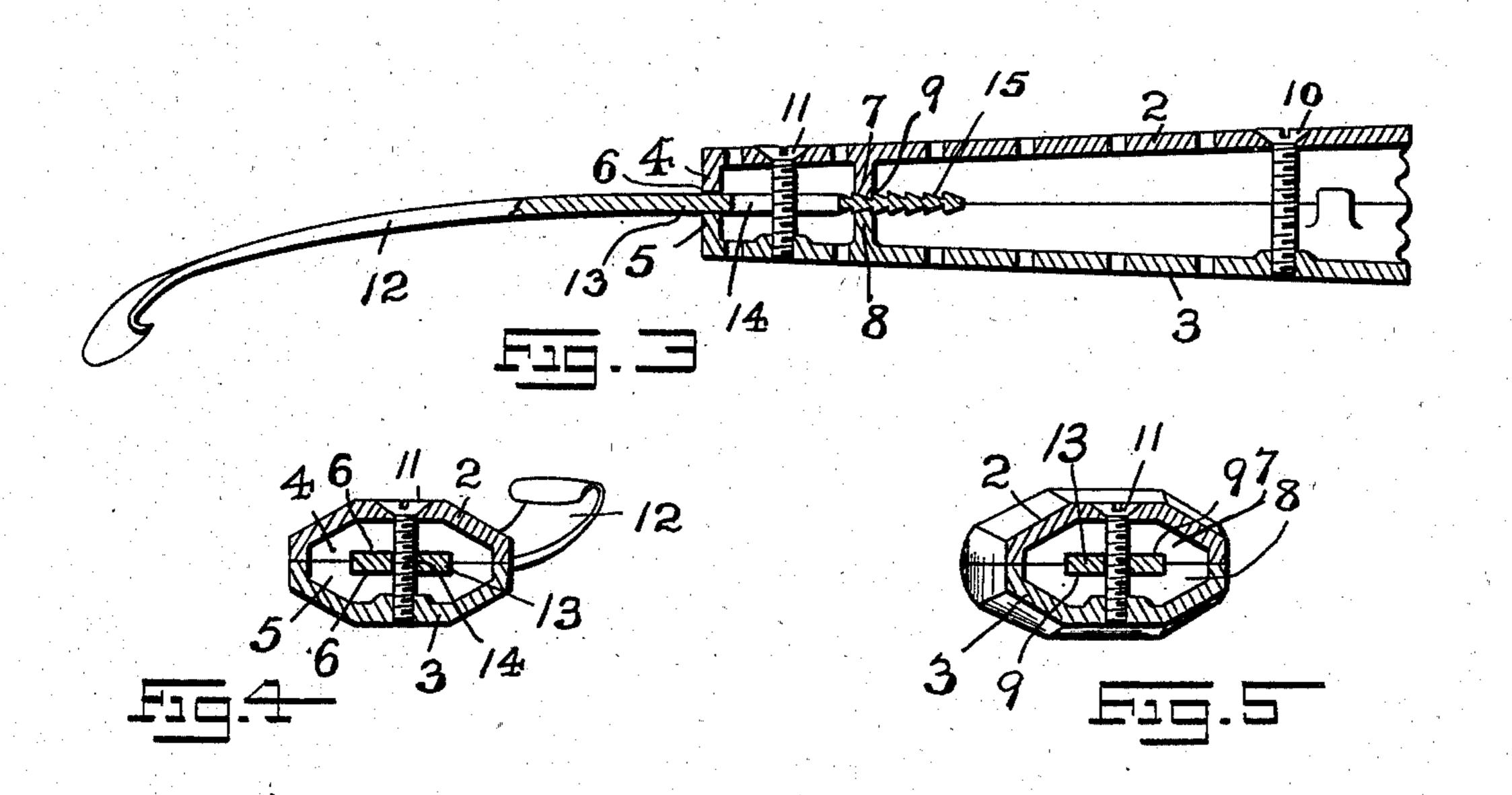
P. E. HELLER. FARRIER'S KNIFE.

APPLICATION FILED JULY 24, 1902.





WITNESSES:

Geo Douglass

INVENTOR:

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FARRIER'S KNIFE.

SPECIFICATION forming part of Letters Patent No. 719,797, dated February 3, 1903.

Application filed July 24, 1902. Serial No. 116,779. (No model.)

To all whom it may concern:

Be it known that I, PAUL E. HELLER, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Farriers' Knives; 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, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

improvements in farriers' knives, and more particularly to a novel arrangement and construction of a pair of separable or sectional handle members for a knife of the character hereinafter specified and the shank of the knife positively and adjustably arranged between oppositely-placed holding ribs or jaws connected with the handle members, the said ribs or jaws being capable of being brought in positive holding engagement with a serrated end portion of the shank of the knife-blade.

The principal objects of the present invention are to provide a novel and simply-constructed farrier's knife in which the knife-blade is capable of a large number of adjustments longitudinally, so that the knife-handle and its blade will fit more naturally the hands of various persons.

Heretofore in farriers' knives having adjustable blades the blade was capable of but two adjustments, and in order to make these adjustments it became necessary to entirely separate a pair of handle members by removing the holding-screws therefrom in order that the knife-blade-retaining screw could be removed from one perforation in the shank of the knife-blade to another perforation in said shank, and so accomplish but two adjustments. This of course was a tedious process and caused much annoyance to the person handling the tool.

A further object of my invention, therefore, is to do away with this annoyance and to pro-

vide a farrier's knife the knife-blade of which 50 can be adjusted to a large number of degrees, and that also without the necessity of the entire separation of the two handle members, as heretofore.

The invention consists in the novel construction of a farrier's knife hereinafter fully set forth; and, furthermore, this invention consists in such various novel arrangements and combinations of parts, all of which will be fully described in the following specification and then finally embodied in the clauses of the claim.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a farrier's knife 65 embodying the principles of my present invention, and Fig. 2 is a similar view of the knife with one of the handle members or sections removed to illustrate the means of adjustment between the shank of the knife-70 blade and the handle members. Fig. 3 is a horizontal section taken on line 3 3 in said Fig. 1; and Figs. 4 and 5 are two vertical transverse sections taken on line 4 4 in said Fig. 1 looking, respectively, in the directions 75 of the arrows x and y in said figure.

Similar characters of reference are employed in all of the said above-described views to indicate corresponding parts.

In the said drawings the reference character 80 ter 1 indicates the complete farrier's knife, the same comprising a pair of hollow and curved handle members or sections 2 and 3. At one end the said handle members 2 and 3 are made with a pair of oppositely-placed ribs 85 4 and 5, each rib being formed with a recess 6 to provide a guide in which a portion of the shank of the knife-blade is movably arranged when the two handle members or sections 2 and 3 are placed upon each other. The said 90 handle members or sections 2 and 3 are made with another pair of ribs 7 and 8, each rib being formed with a recess 9 for the purposes to be presently more fully set forth. The two handle members or sections are secured and 95 held in their separable relation by means of screws 10 and 11, as clearly illustrated.

The knife-blade is indicated by the refer-

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ence character 12, and it is provided with a shank 13, which is slidably arranged in the guide formed by the two oppositely-placed recesses 6 of the end ribs 4 and 5, the said 5 shank 13 being also provided with an elongated hole or slot 14 and serrations 15 on both sides (preferably, but not necessarily so) of the inner end portion of the shank of the knife-blade. This serrated end of the said 10 shank is slidably arranged in the oppositelyplaced recesses 9 of the two inner ribs 7 and 8, and the screw 11 passes directly through the elongated hole or slot 14, all of which is clearly illustrated in the accompanying draw-15 ings.

From an inspection of Figs. 2 and 3 it will be clearly seen that when the two handle members or sections 2 and 3 have been placed upon each other with the shank 13 of the 20 knife-blade 12 arranged in the recesses of the respective ribs 4 and 5 and 7 and 8 and the two screws 10 and 11 tightly screwed up the said knife-blade will be firmly and securely held in its operative position between 25 the holding members or ribs of the two handle members or sections 2 and 3, as will be clearly evident. By slightly unscrewing the screw 11 the shank 13 of the knife-blade 12 may be slid farther into the two connected 30 handle members or sections 2 and 3 or may be moved farther out, the length of the elongated hole or slot 14 limiting the movement of the parts to prevent the accidental withdrawal of the knife-blade from the handle or 35 to prevent it from being pushed in too far, and when the parts have been brought in their adjusted relation desired by the farrier then the screw 11 is again tightened and the parts are securely and positively retained in their 40 tightened and properly-adjusted positions against accidental displacement ready for use, and that without having been compelled to entirely remove the screws and cause the complete separation of the two handle members 45 or sections, as in the constructions of farriers'

The serrated portion of the shank 13 is for the purpose of producing a tight bind or grip between the biting edges of the oppositely-50 placed ribs 7 and 8 and the serrations 15, these parts being relied upon to prevent any lateral or side motion of the knife when in its adjusted and secured position, while the screw 11 simply acts to produce the necessary bind-55 ing or holding power between the various parts, and also the said screw 11 acts as a means or a stop to limit the longitudinal sliding movement of the knife-blade and its shank while adjusting the same.

knives now in use.

60 The advantages of my invention are evident, for by the arrangement of the parts as herein described the knife-blade is capable of various degrees of adjustment, whereby the tool can be made to fit the different sizes of 65 hands of different workmen.

I am aware that some changes may be made in the details of the construction and the ar-

rangements and minor combinations of the parts without departing from the scope of my present invention. Hence I do not limit my 70 invention to the exact arrangements and combinations of the parts as described in the previous specification and as illustrated in the accompanying drawings, nor do I confine myself to the exact details of the construction of 75 the said parts.

Having thus described my invention, what

I claim is—

1. A farrier's knife, comprising, a pair of hollow handle members, means for securing 80 said members together, guide-ribs connected with said members, a knife-blade provided with a shank arranged between said ribs, and serrations on said shank with which said ribs are brought in biting and holding engage- 85 ment, substantially as and for the purposes set forth.

2. A farrier's knife, comprising, a pair of hollow handle members, means for securing said members together, guide-ribs connected 90 with said members, a knife-blade provided with a shank arranged between said ribs, and serrations on said shank with which said ribs are brought in biting and holding engagement, the said shank also being provided with 95 an elongated hole, and means connected with said handle members extending into said elongated hole to permit of a longitudinal adjustment of said blade, but acting as a stop to limit such adjustment, substantially as and roo for the purposes set forth.

3. A farrier's knife, comprising, a pair of hollow handle members, means for securing said members together, guide-ribs connected with said members, a knife-blade provided 105 with a shank arranged between said ribs, and serrations on said shank with which said ribs are brought in biting and holding engagement, the said shank also being provided with an elongated hole, and a screw connected with 110 said handle members, said screw extending into said elongated hole to permit of a longitudinal adjustment of said blade, but acting as a stop to limit such adjustment, substantially as and for the purposes set forth.

4. The herein-described farrier's knife, consisting, essentially, of a pair of hollow handle members 2 and 3, having end ribs 4 and 5 provided with recesses 6 forming a guide, and inner ribs 7 and 8 provided with recesses 9, a 120 knife-blade having a shank slidably arranged between the various ribs, and serrations on said shank adapted to be brought in holding engagement with said ribs 7 and 8, substantially as and for the purposes set forth.

5. The herein-described farrier's knife, consisting, essentially, of a pair of hollow handle members 2 and 3, having end ribs 4 and 5 provided with recesses 6 forming a guide, and inner ribs 7 and 8 provided with recesses 9, a 130 knife-blade having a shank slidably arranged between the various ribs, said shank having an elongated hole, and serrations on said shank adapted to be brought in holding en-

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gagement with said ribs 7 and 8, and screws connected with said handle members for securing them together, one of said screws extending into and through said elongated hole 5 and acting as a stop to limit the sliding movement of said knife-blade, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 19th day of July, 1902.

PAUL E. HELLER.

Witnesses:

messes: W. H. Van Iderstine, AMAND G. HELLER.