

No. 813,009.

PATENTED FEB. 20, 1906.

R. KNY.
KNIFE.

APPLICATION FILED JULY 29, 1905.

Fig. 1.

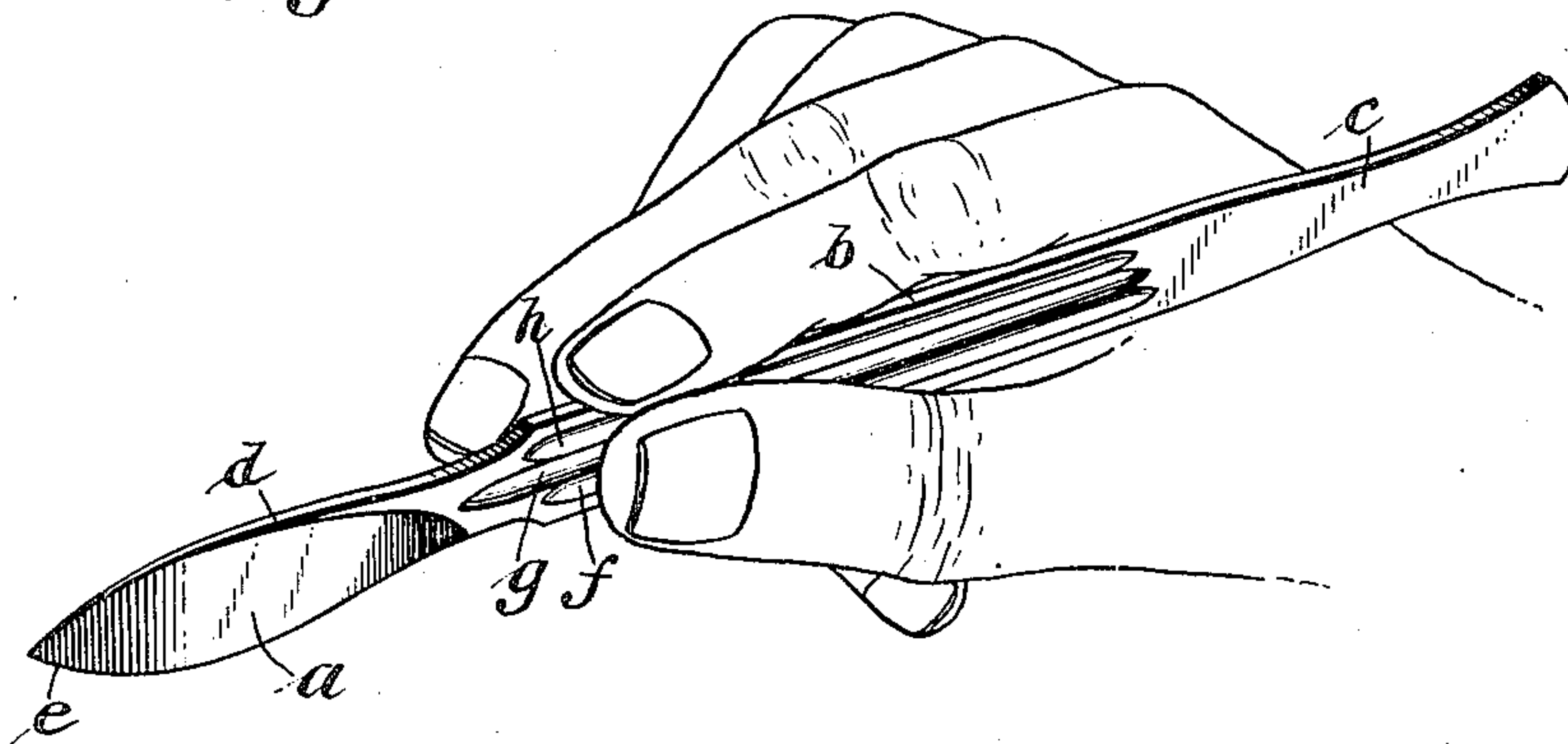


Fig. 2.

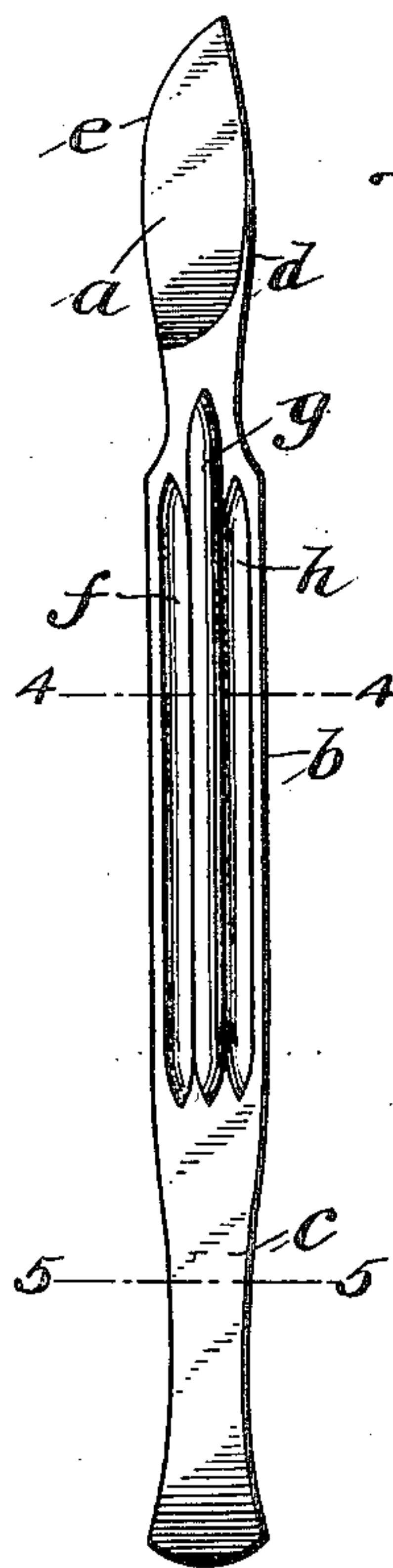


Fig. 3.

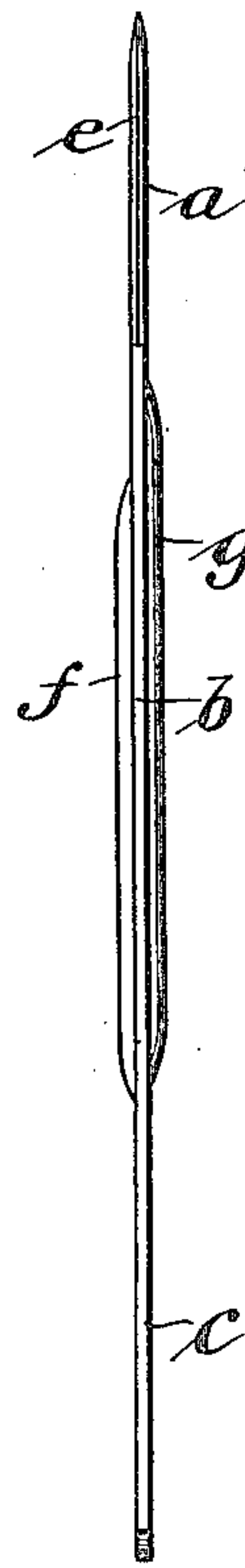


Fig. 4.



Fig. 5.



Witnesses

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RICHARD KNY, OF BROOKLYN, NEW YORK.

KNIFE.

No. 813,009.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RICHARD KNY, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Knives, of which the following is a specification.

This invention relates to knives, but more especially to what are known as "surgeons' knives."

Knives of this class must be made of the very best material capable of being given the highest polish and of such form as to admit of being readily cleansed and sterilized, as well as capable of being given the very finest edge by sharpening and of retaining this edge for the longest possible time. They must also be of such form as to permit of a firm hold by the hand of the operator, so as to prevent possible slipping, and while they should be made as light as possible they should be rigid and stiff. Heretofore in order to provide such knives possessing all of these qualifications the methods of manufacture have been difficult and expensive, and as a consequence of such high original cost such knives have necessarily sold at a comparatively high price, and inasmuch as every complete surgeon's equipment should contain a number of knives the cost of equipment has been very materially increased thereby.

It is the object of this invention to provide a knife of this general class which shall possess all of the before-mentioned qualifications, but which may be manufactured at a very low cost, and with this object in view the invention consists in the improved construction of knife hereinafter fully described and afterward specifically claimed.

In order that others skilled in the art to which this invention most nearly appertains may be enabled to make and use the same, I shall now proceed to describe its construction and operation in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of a knife embodying my improvements; Fig. 2, a view thereof in side elevation; Fig. 3, a view thereof in edge elevation; Fig. 4, a sectional view on the broken line 4 4 of Fig. 2, and Fig. 5 a sectional view on the broken line 5 5 of Fig. 2.

Referring specifically to the drawings, the knife comprises three portions *a*, *b*, and *c*, *a* being the blade and *b* and *c* combined the handle, the portion *b* serving as the grip or

handhold and the portion *c* being on the opposite end from the blade *a* and serving to rest against the hand of the operator to steady his hold upon the knife during an operation as well as to balance the instrument.

It will be observed that the whole instrument is in one piece, preferably of flat steel, stamped from a sheet or forged into form for a blank of which to form the knife. This blank is pressed, rolled, stamped, or drop-forged by a single operation into the finished form shown, after which it has only to be ground and polished to finish it ready for use. It may be nicked or otherwise plated, if desired.

The blade *a* at its back *d* is substantially of the thickness of the blank and is ground or otherwise brought to a keen edge, as at *e*, the edge being straight or curved, as may be desired.

The part *b* is longitudinally corrugated, any suitable number of corrugations being permissible, three being here shown, as at *f*, *g*, and *h*, the middle corrugation *g* being projected toward the side of the handle which might be called the "front," (when the knife is grasped in the right hand of the operator,) while the outer corrugations *f* and *h* are projected from the opposite side or the back of the knife. When thus grasped in the right hand, the thumb of the operator will rest on the rib of corrugation *g* and the side of the middle finger in the groove of that corrugation on the back of the handle between the ribs of the corrugations *f* and *h*, while the part *c* will be pressed against the knuckle of the first finger, thus giving the operator a firm grip upon the knife and effectually preventing it from slipping in his hand. At the same time the corrugations *f*, *g*, and *h* will stiffen the whole structure, thus enabling it to be made out of a very much lighter and thinner blank than would otherwise be possible, whereby the first cost of material is lessened and the manufacture by rolling, stamping, &c., greatly facilitated.

While I have described the formation of a blank from which the knife is afterward shaped, it will be clearly obvious to persons skilled in the art that the shaped knife (including the two parts of the handle) may be stamped up or pressed out of a sheet of metal at a single operation without first forming a blank and afterward shaping the blank.

Slight changes may be made in the form of the various parts which may suggest them-

selves to the manufacturer without departing from the spirit and scope of the invention.

What I claim as new is—

5 1. A knife comprising a blade and handle formed of a single piece of metal, the handle having a central longitudinal rib projected out of the general plane of the metal on one side, and two outer longitudinal ribs on the
10 opposite side.

2. A knife comprising a blade and handle formed of a single piece of metal of substantially regular thickness, the blade at the back being substantially of the thickness of the
15 original metal, and the handle joining the

blade and formed with alternating oppositely-faced longitudinal corrugations.

3. A surgeon's knife comprising a blade and handle formed of a single piece of metal, the handle comprising a portion next to the
20 blade provided with alternating, oppositely-faced, longitudinal corrugations, and a flat portion beyond the corrugated portion.

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

RICHARD KNY.

Witnesses:

WILLIAM R. BAIRD,
ALAN C. McDONNELL.