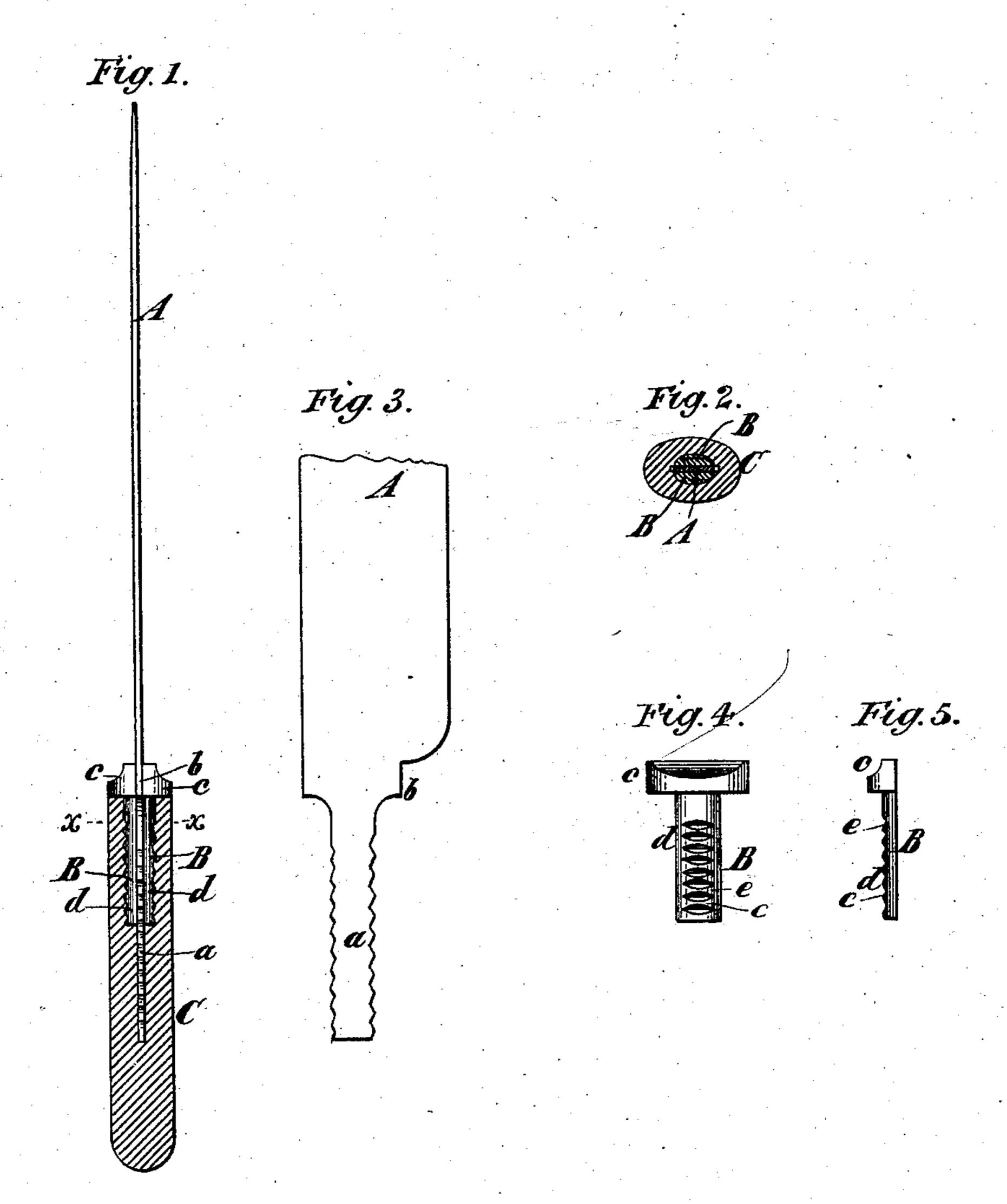
## C. WINGFIELD.

KNIFE

No. 294,558.

Patented Mar. 4, 1884.



Witnesses Gerwadman James R. Bowen Charles Hingfield, By lie attorney, Edmin H. Brown,

## United States Patent Office.

CHARLES WINGFIELD, OF SHEFFIELD, COUNTY OF YORK, ENGLAND, AS-SIGNOR TO JOSEPH RODGERS & SONS, (LIMITED,) OF SAME PLACE.

SPECIFICATION forming part of Letters Patent No. 294,558, dated March 4, 1884.

Application filed January 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WINGFIELD, of Sheffield, in the county of York, England, have invented a certain new and useful Im-5 provement in Cutlery, of which the following is a specification.

My improvement relates to knife-blades and other articles having flat tangs and combined with handles made of plastic material.

The object of the improvement is to provide bolsters for such articles.

To this end the improvement consists in the combination, with a knife-blade or analogous article provided with a flat tang, of externally-15 roughened bolster-pieces adapted to fit close to the sides of the tang and against the heel of the blade or analogous article, and a handle made of a plastic material molded or otherwise formed around the tang and bolster-20 pieces, so as to secure the bolster-pieces within it by contact with its roughened exterior and the tang by contact with its edges.

In the accompanying drawings, Figure 1 is an edge view of a knife-blade, its tang, and 25 bolster-pieces, and a longitudinal section of the handle. Fig. 2 is a transverse section, taken at the line x x, Fig. 1. Fig. 3 is a side view of the knife-blade and its tang. Fig. 4 is a side view of one of the bolster-pieces, and 30 Fig. 5 is an edge view thereof.

Similar letters of reference designate corre-

sponding parts in all the figures.

A designates a knife-blade, of ordinary material, having a flat tang, a, whose sides are 35 coincident with the sides of the heel b of the blade.

B designates bolster-pieces, of which there are two—one for each side of the heel of the knife-blade and of the tang. They may be 40 made of metal. Each bolster-piece consists of a head, c, adapted to fit against one of the sides of the heel of the knife-blade, and made externally of ornamental form, and a shank,

d, adapted to fit against the corresponding side of the tang of the knife-blade and ex- 45 ternally roughened. The roughening of the shank d consists, as here shown, of ribs or ridges e, having abrupt faces on the sides which are the nearer to the head c. The edges of the tang are left irregular and rough. The 50 bolster-pieces are placed one on each side of the tang of the knife-blade, with the heads coverlying the heel of the knife-blade, and the handle C is then molded or otherwise formed of plastic material around them. The handle 55 engages with the irregularities of the edges of the tang of the knife-blade and with the ribs or ridges of the bolster, thereby securing the said parts within it. The material which is to be generally used for the handles is ebon- 60 ite or xylonite. I prefer to make the handles first, and then expand them by heat and slip them over the tang of the knife-blade and the bolster-pieces while the latter are held in a vise. When the handles contract, they grip 65 the tang and bolster-pieces tightly. If the adjacent surfaces of the tang of the knife-blade and the bolster-pieces were roughened sufficiently to engage positively, the edges of the tang could be made smooth.

The bolster-pieces and knife-blade may be buffed or otherwise finished to suit the taste.

What I claim as my invention, and desire to

secure by Letters Patent, is—

The combination, with a knife-blade or 75 analogous article provided with a flat tang, of externally-roughened bolster-pieces adapted to fit close to the sides of the tang and against the heel of the knife-blade or analogous article, and a handle made of plastic material 80 molded or otherwise formed around the tang and bolster-pieces, substantially as specified.

CHARLES WINGFIELD.

Witnesses:

WILLIAM P. SATT, F. F. HIBBERT.