

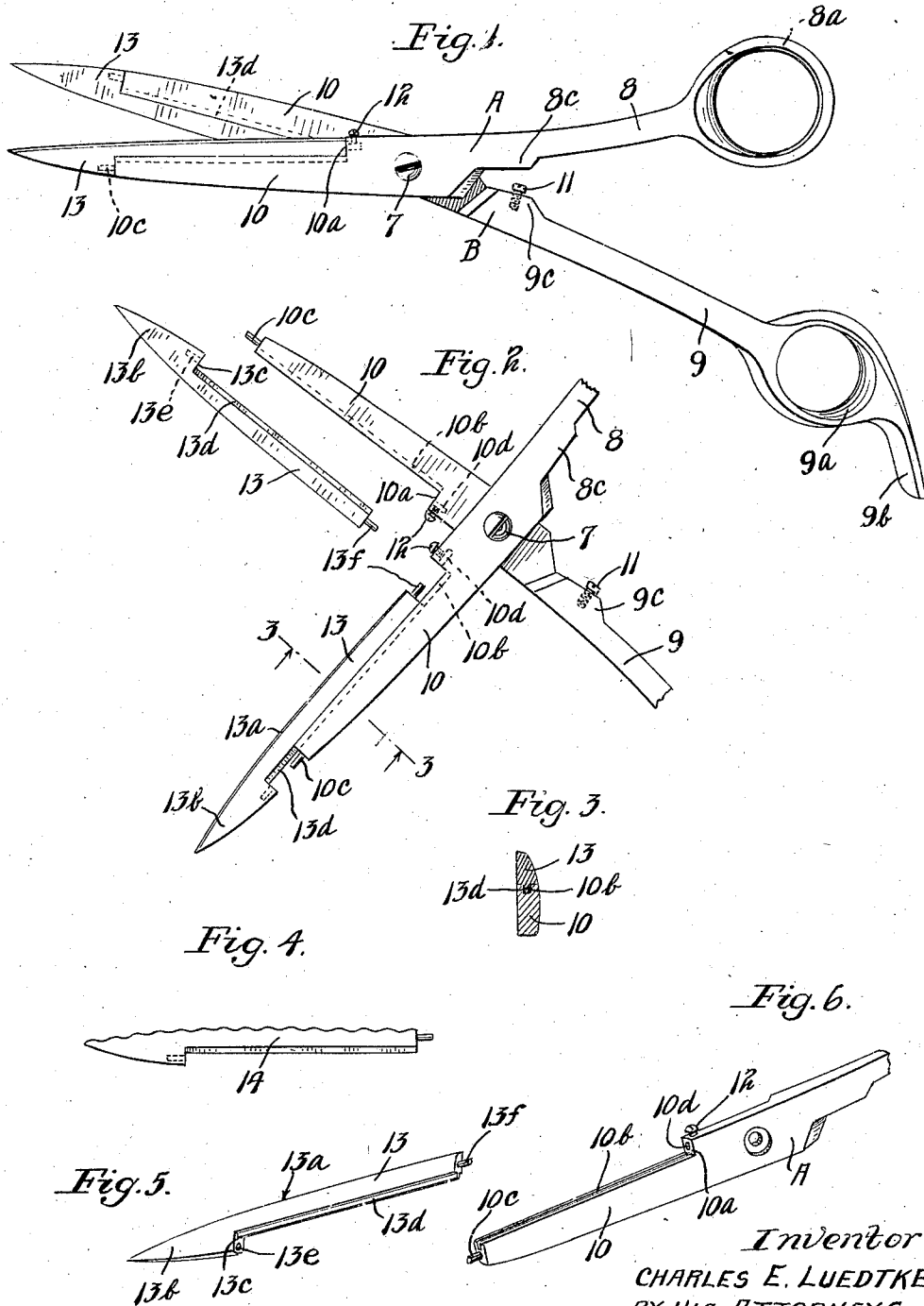
Feb. 1, 1927.

C. E. LUEDTKE

1,615,882

SHEARS

Filed Jan. 18, 1926



Inventor
CHARLES E. LUEDTKE
BY HIS ATTORNEYS.

Williamson, Reif & Williamson

UNITED STATES PATENT OFFICE.

CHARLES E. LUEDTKE, OF CHATFIELD, MINNESOTA, ASSIGNOR OF ONE-HALF TO OTTO C. BENSON, OF MINNEAPOLIS, MINNESOTA.

SHEARS.

Application filed January 18, 1926. Serial No. 81,984.

This invention relates to shears and particularly to barber shears.

It is an object of this invention to provide a pair of shears having a pair of blades 5 releasably securable thereon.

Another object of the invention is to provide a pair of shears having means thereon for securing interchangeable blades thereto.

It is still another object of the invention 10 to provide a pair of shears having means thereon for adjustably limiting the closing movement of the shears.

A further object of the invention is to provide a pair of shears having finger portions 15 thereon which will conveniently accommodate the hand of the operator when using the device.

These and other objects and advantages of the invention will be fully set forth in the following description made in connection with the accompanying drawings in which like reference characters refer to similar parts throughout the several views and in which:

25 Fig. 1 is a plan view of the device showing a pair of blades secured in working position;

Fig. 2 is a partial plan view of the device showing one of the blades partially secured and another blade in a position to be secured;

30 Fig. 3 is a section taken on the line 3—3 of Fig. 2, as indicated by the arrows;

Fig. 4 is a plan view of one type of blade 35 used;

Fig. 5 is a perspective view of another type of blade; and

40 Fig. 6 is a perspective view of the blade securing portions of one of the body members.

The two body members of a pair of shears are indicated by the letters A and B, pivoted together at intermediate portions, by means of pivot 7 and having handling portions 8 and 9 respectively, and similar blade holding portions 10. Handling portion 8 has formed at its outer end the thumb receiving portion 8^a, while handling portion 9 has formed therein adjacent its outer end, the finger receiving portion 9^a and at its extreme end the finger accommodating portion 9^b. Handling portion 8 is of greater length than handling portion 9, so that finger receiving portion 9^a is more distant from 55 pivot 7 than thumb receiving portion 8^a.

Adjacent the pivot 7 opposing shoulders 8^c and 9^c are formed on handling portions 8 and 9, one of which, as 9^c, has a threaded recess adapted to receive the adjustable stop screw 11.

The blade holding portions 10 each have 60 inwardly extending shoulders 10^a forming longitudinal recesses thereon. The opposing edges of the recesses have longitudinal grooves 10^b formed therein, the outer ends of the portions 10 form right angles with the opposing respective edges of the recesses and have the tenons 10^c projecting outwardly therefrom. Shoulders 10^a have mortises 10^b formed therein and set screws 12 extending 70 inwardly at an angle to said mortises.

Blades 13 are provided each having a cutting edge 13^a, an arrow shaped tip 13^b, the single barb of which forms the shoulder 13^c. Each blade has an outwardly projecting longitudinal tongue 13^d adapted to engage the groove 10^b on the non-cutting edge of blade 13. A mortise 13^e is formed in each shoulder 13^c adapted to seat a tenon 10^c; and a tenon 13^f is formed on the inner 80 end of the blade adapted to be seated within a mortise 10^d on a blade securing portion.

Although Figs. 1, 2, 3 and 5 show blades having smooth cutting edges, 13^a, blades 85 having any type of cutting edges may be used such as, for example, the blade shown in Fig. 4, having corrugated cutting edge 14.

Operation.

90 A cutting blade 13 is secured to a blade holding portion 10 by inserting the tongue 13^d of the blade within the groove 10^b and sliding the blade inwardly on portion 10 until the tenons 10^c and 13^f are seated within their co-operating mortises. In this position the shoulder 10^a will abut the inner end of the blade 13 and the shoulder 13^c will abut the outer end of portion 10. Set screw 12 may now be tightened against the tenon 13^f to securely anchor the blade on the portion 10. A blade having been anchored upon each of the blade securing portions 10 of members A and B, the shears are 95 ready for use. The shears can now be grasped with the thumb of the operator extending through the thumb receiving portion 8^a of the member A and one of the middle fingers of the operator extending through the finger receiving portion 9^a of the mem- 100 105 110

ber B and an adjacent finger fitting within the notched finger receiving portion 9^b. As the finger receiving portion 9^a is farther distant from the pivot 7 than the thumb receiving portion 8^a on portion 8, it can be seen that the operator can conveniently grasp the members A and B in a natural position. Set screw 12 can be adjusted to limit the closing movement of the members 7 and 8 so that the extreme points 13^b of the blades in use will exactly meet when the shears are in closed position.

When it is desired to remove the blades 13 for sharpening or to substitute other blades therefor, of different type, set screws 12 may be loosened and the blades slidably removed. Sharpened or different types of blades may then be substituted in place of the old blades on the blade holding portions 10, and the shears will again be ready for use.

It can be seen that with applicant's device the shears can be kept continuously in use while the blades thereof are being sharpened or different types of blades can be used in the same device without the necessity of providing a different type of shears for every different type of blade used.

The parts of the device are simple and may be easily and inexpensively constructed. The device has been amply demonstrated and

it has been found to be very useful for the purposes set forth.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departing from the scope of applicant's invention, which, generally stated, consists in the matter shown and described and set forth in the appended claim.

What is claimed is:

A pair of shears comprising intermediately pivoted members having blade holding portions with shoulders adjacent their pivot, longitudinal mortises formed on the opposing surfaces of said portions extending outwardly from said shoulders, the outer ends of said portions being angularly cut to the mortised surfaces, and detachable blades having longitudinal tenons thereon adapted to engage in said mortises, the inner ends adapted to abut against the shoulders of said blade holding portions, said blades having shoulders adjacent their outer ends adapted to abut against the outer ends of said portions; the abutting shoulders and ends of said blade holding portions and blades having co-operating mortises and tenons.

In testimony whereof I affix my signature.

CHARLES E. LUEDTKE.