

Jan. 6, 1953

H. D. SNELL

2,624,161

ABRADING TOOL

Filed Aug. 16, 1951

Fig. 1.

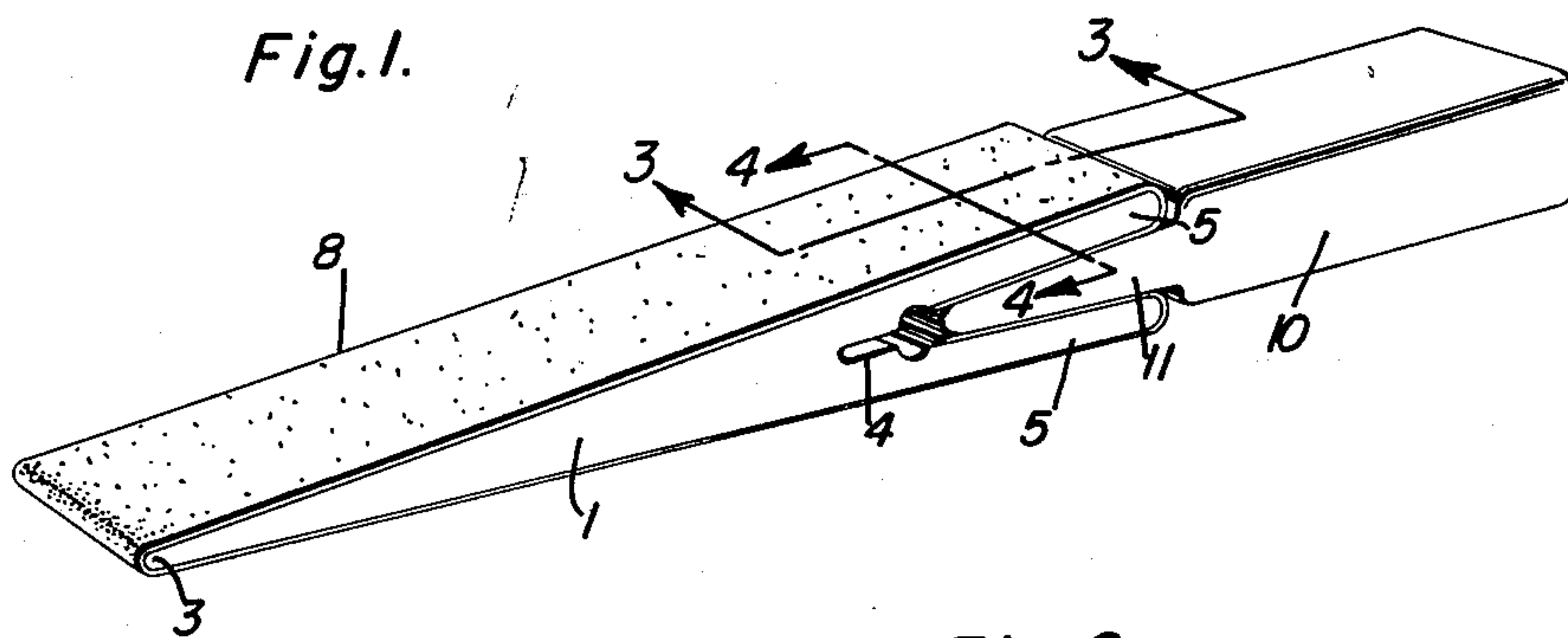


Fig. 2.

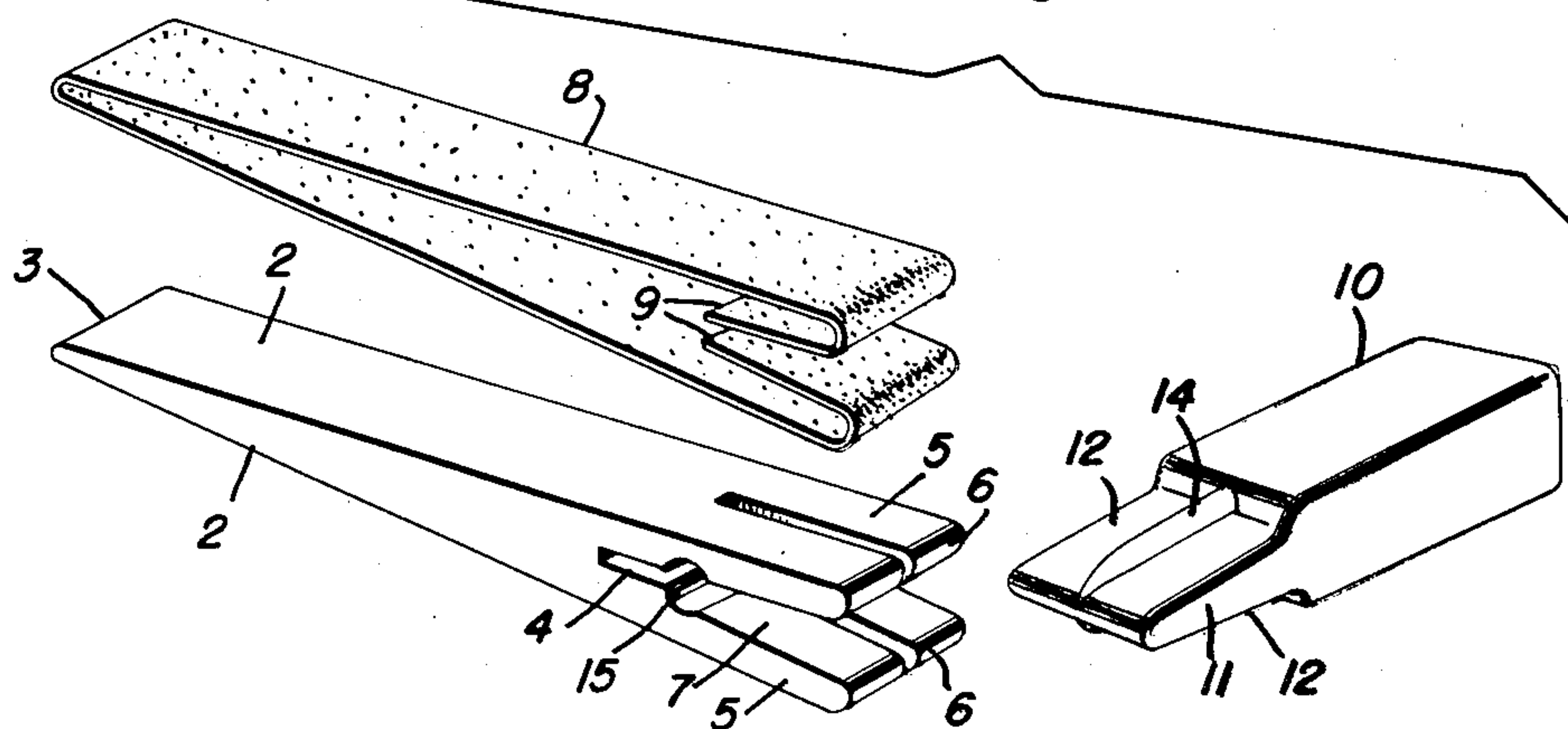


Fig. 3.

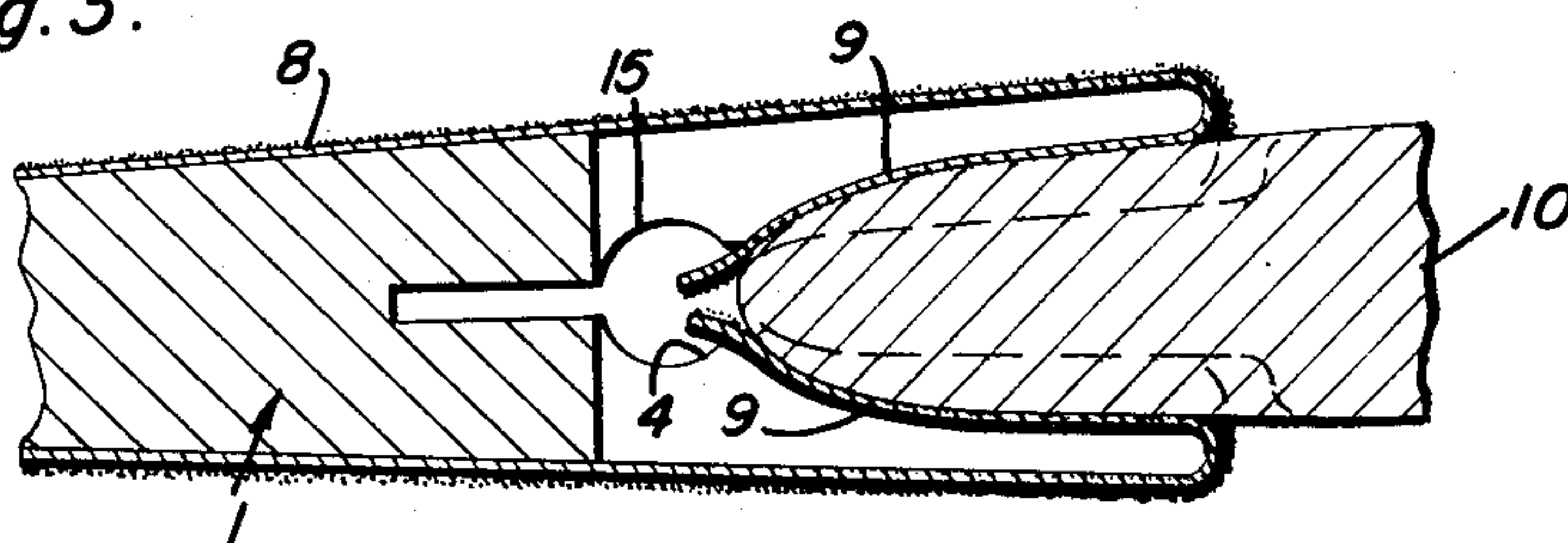
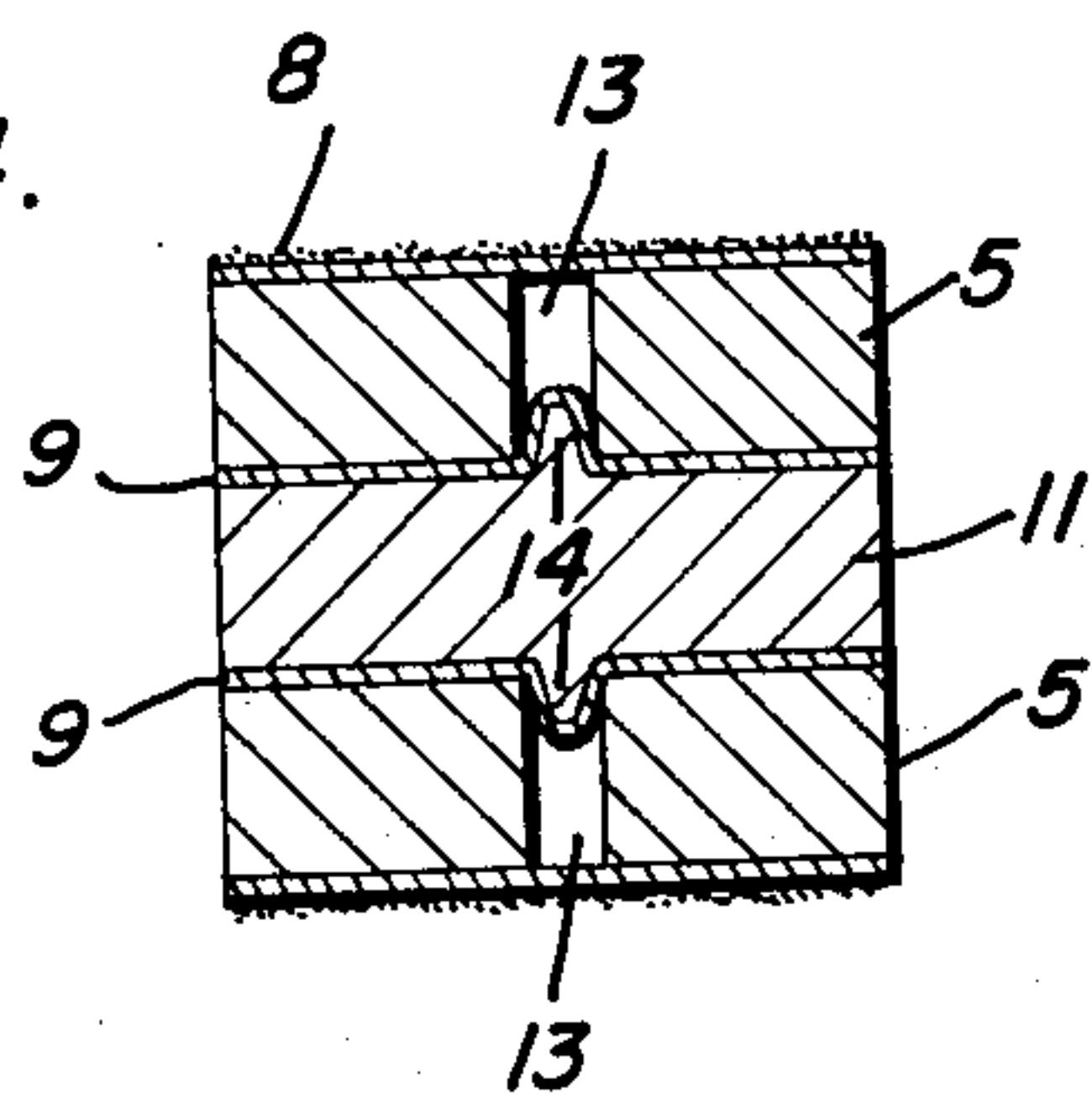


Fig. 4.



Harm D. Snell

INVENTOR.

BY

Oliver A. O'Brien
and Harvey B. Jackson
Attorneys

UNITED STATES PATENT OFFICE

2,624,161

ABRADING TOOL

Harm D. Snell, Port Arthur, Tex.

Application August 16, 1951, Serial No. 242,071

1 Claim. (Cl. 51-187)

1

My invention relates to improvements in abrading hand tools of the sandpaper type, for household or shop use in smoothing down operations particularly on flat work.

The primary object of my invention is to provide a simple form of inexpensive abrading tool, of the type specified, with an elongated, tapered, abrading section having flat sides covered by a single strip of emery paper, or cloth, which is detachably secured in place in taut condition by merely attaching a handle to the section, whereby to obviate the use of tacks, glue, staples, or like fasteners for securing the strip in place.

Other and subordinate objects, within the purview of my invention, together with the precise nature of my improvements will be readily understood when the succeeding description and claims are read with reference to the drawing accompanying and forming part of this specification.

In said drawing:

Figure 1 is a view in perspective of my improved hand tool in the preferred embodiment thereof;

Figure 2 is a composite view in perspective of the parts of the tool disassembled;

Figure 3 is a fragmentary view in longitudinal section taken on the line 3-3 of Figure 1 and drawn to a larger scale; and

Figure 4 is a view in transverse section taken on the line 4-4 of Figure 1 and drawn to a larger scale.

Referring to the drawing by numerals, in the embodiment illustrated therein, my improved tool comprises an elongated front abrading section 1 having opposite broad, flat sides 2 converging to a transversely rounded front end 3 on said section 1 and imparting a forward taper to said section. The front section 1 is formed with the rear end bifurcated, as at 4, in the plane of the section and providing a pair of spaced opposite jaws 5 on the rear end of said section having transversely rounded rear ends 6 and defining therebetween a forwardly tapering longitudinal slot 7.

A strip 8 of flexible abrasive material, such as emery paper, or cloth, covers the sides 2 of said section 1 and is folded around said front end of said section with its ends 9 folded around the rear ends 6 of the jaws 5 and extended forwardly in the slot 7.

A rear handle section 10 for the front section 1 is provided and formed with a reduced front end tongue 11 of the same width as the jaws 5 and having forwardly converging opposite sides 12, said tongue 11 fitting in the slot 7 with a wedge fit and clamping the folded ends of the strip 8 between the same and the jaws 5 to secure the strip 8 to said front section 1.

The jaws 5 are each provided with a central longitudinal slot 13, and the tongue 11 is provided on its sides 12 with longitudinal central ribs 14 extending into the central slots 13 in the jaws 5 and crimping said ends 9 of the strip 8 into the central slots 13 of the jaws 5 to additionally secure the strip 8 to the front section 1.

2

The bifurcation 4 extends forwardly of the first named slot 7 to provide a clearance 15 for accommodating the terminals of the folded ends 9 of the strip 8 if said ends are longer than the slot 7.

The front section 1 and the handle section 2 are formed of any suitable material having a certain amount of resiliency, preferably wood, so that the jaws 5 may be spread slightly apart by inserting the tongue 11 in the slot 7, whereby said jaws will react to clampingly engage the ends 9 of the strip 8 and thereby facilitate drawing the strip 8 taut during attachment of the handle section 10.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention, without further explanation.

Manifestly, the invention, as described, is susceptible of modification, without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claim.

Having described the invention, what is claimed as new is:

An abrading hand tool comprising an elongated front section having sides and a front end, said section having a rear end bifurcated in the plane of the section and providing a pair of spaced opposite jaws on the rear end of said section having transversely rounded rear ends and defining therebetween a forwardly tapering longitudinal slot, a strip of flexible abrasive material covering said sides and folded around said front end of the section with its ends folded around the rear ends of the jaws, and extended forwardly into said slot, and a rear handle section having a reduced front end tongue of the same width as said jaws and having forwardly converging offset sides, said tongue fitting in said slot with a wedge fit and clamping the folded ends of said strip between the same and said jaws to secure said strip to said front section, said jaws being each provided with a longitudinal central slot and said tongue being provided on said sides thereof with longitudinal central ribs extending into the central slots in the jaws and crimping said ends of the strip into said central slots to additionally secure said strip to said front section.

HARM D. SNELL.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,481,309	Gunnarson	Sept. 6, 1949
2,527,021	May	Oct. 24, 1950

FOREIGN PATENTS

Number	Country	Date
200,783	Great Britain	July 12, 1923
201,977	Great Britain	Aug. 13, 1923