

(No Model.)

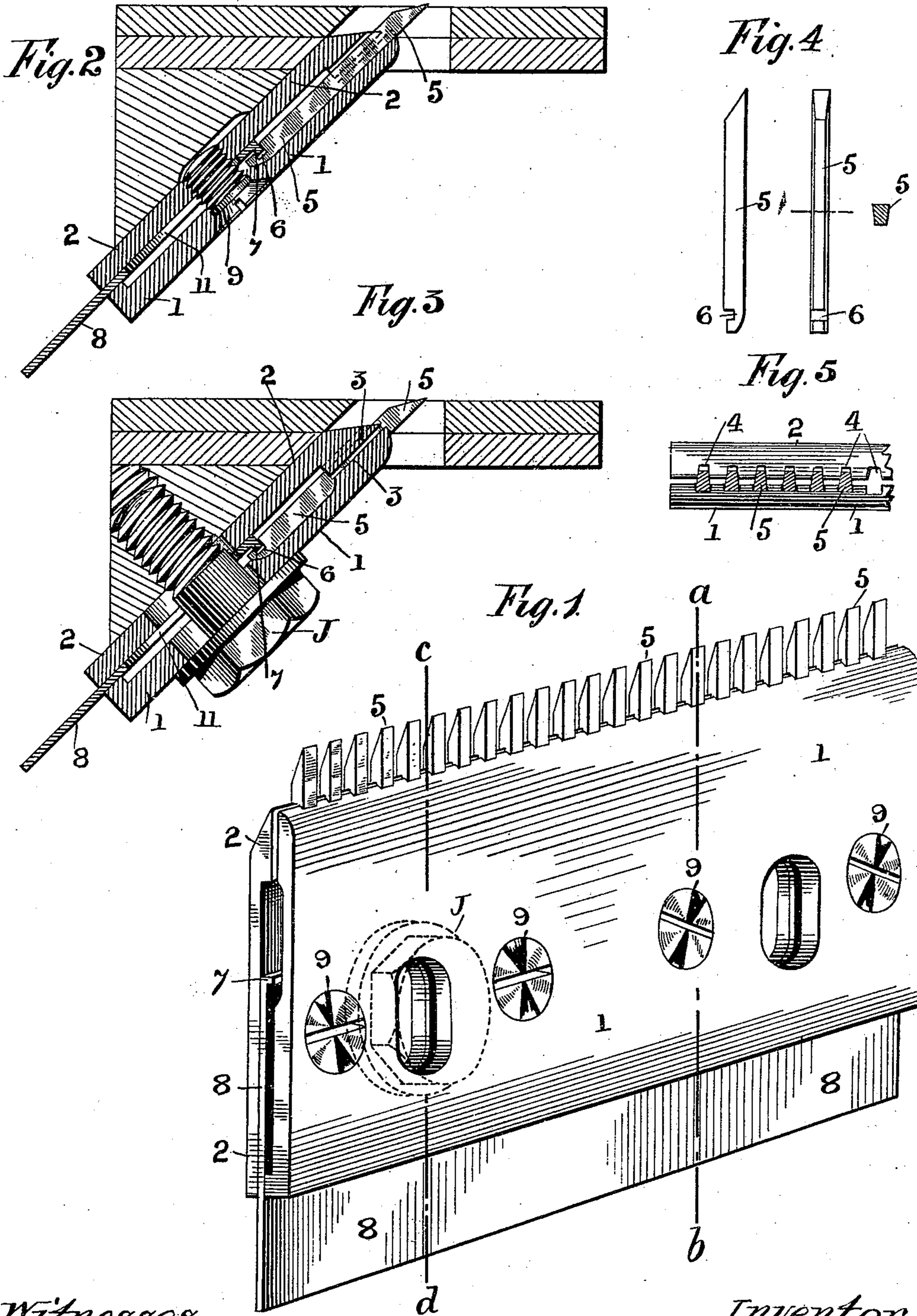
2 Sheets—Sheet 1.

C. HASS.

APPLIANCE FOR SCORING OR GROOVING WOOD.

No. 552,435.

Patented Dec. 31, 1895.



Witnesses:
The A. Green
Robert Everett

Inventor:
Caesar Hass.
By James L. Norris.
Atty.

C. HASS.
APPLIANCE FOR SCORING OR GROOVING WOOD.

No. 552,435.

Patented Dec. 31, 1895.

Fig. 7.

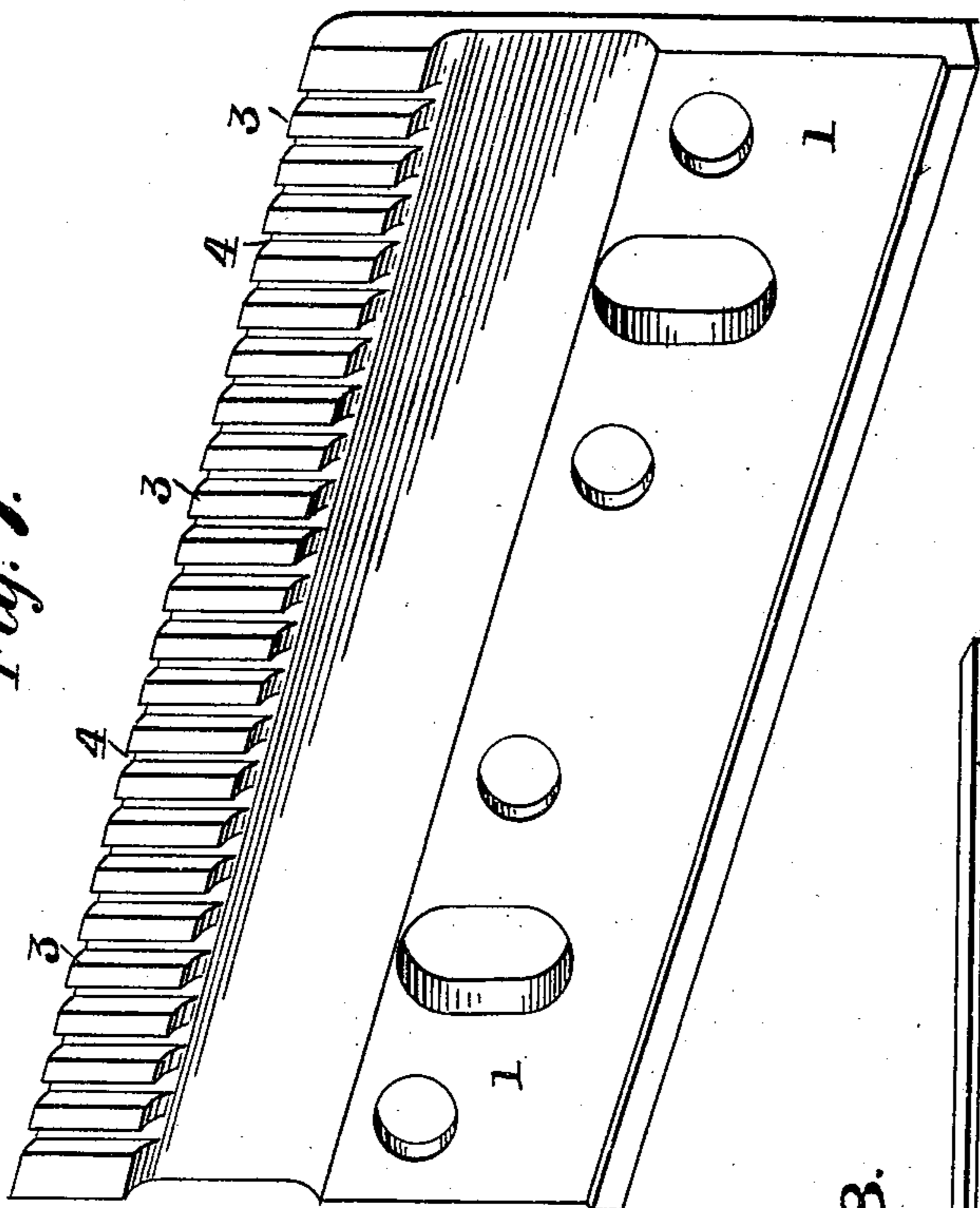


Fig. 6.

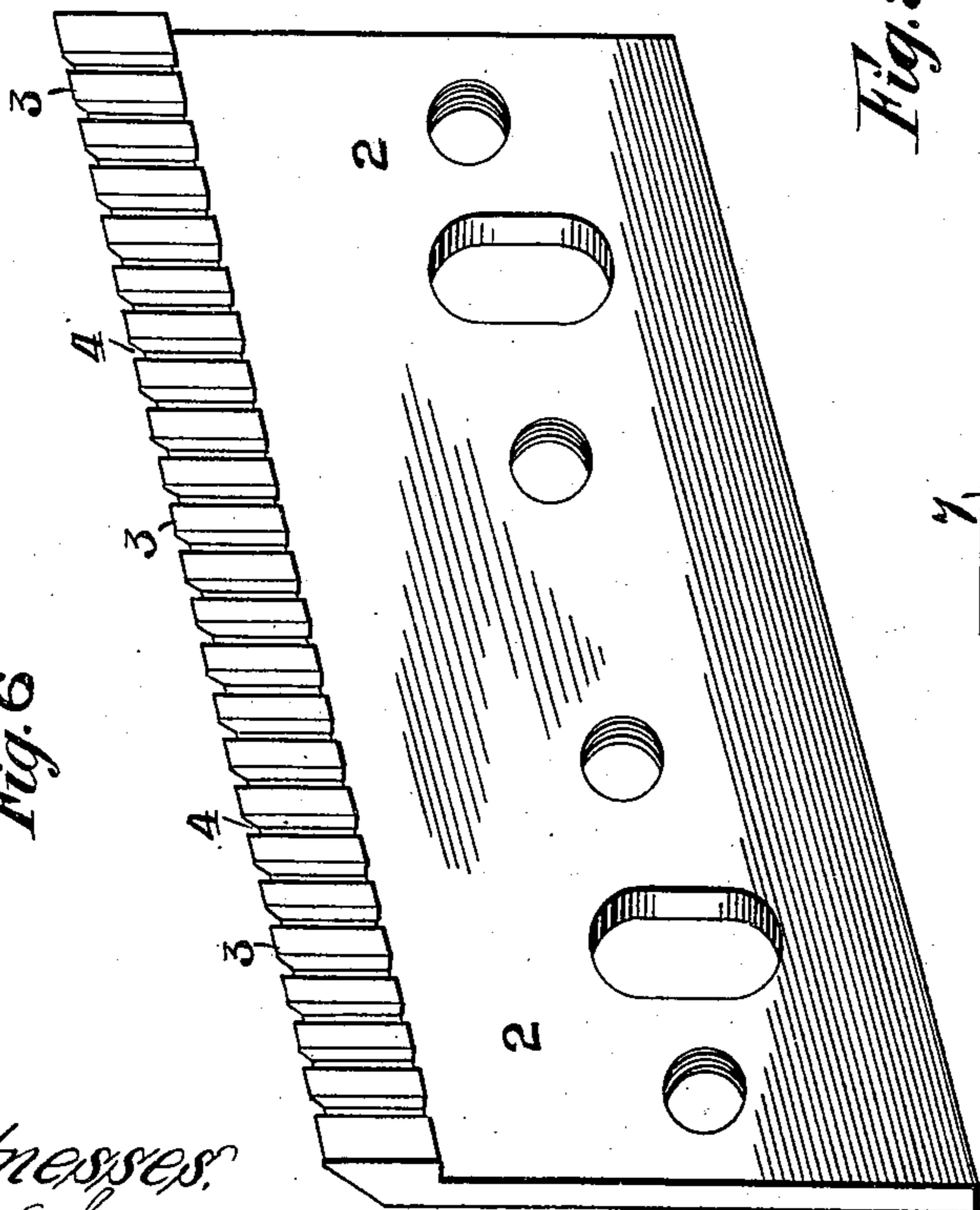
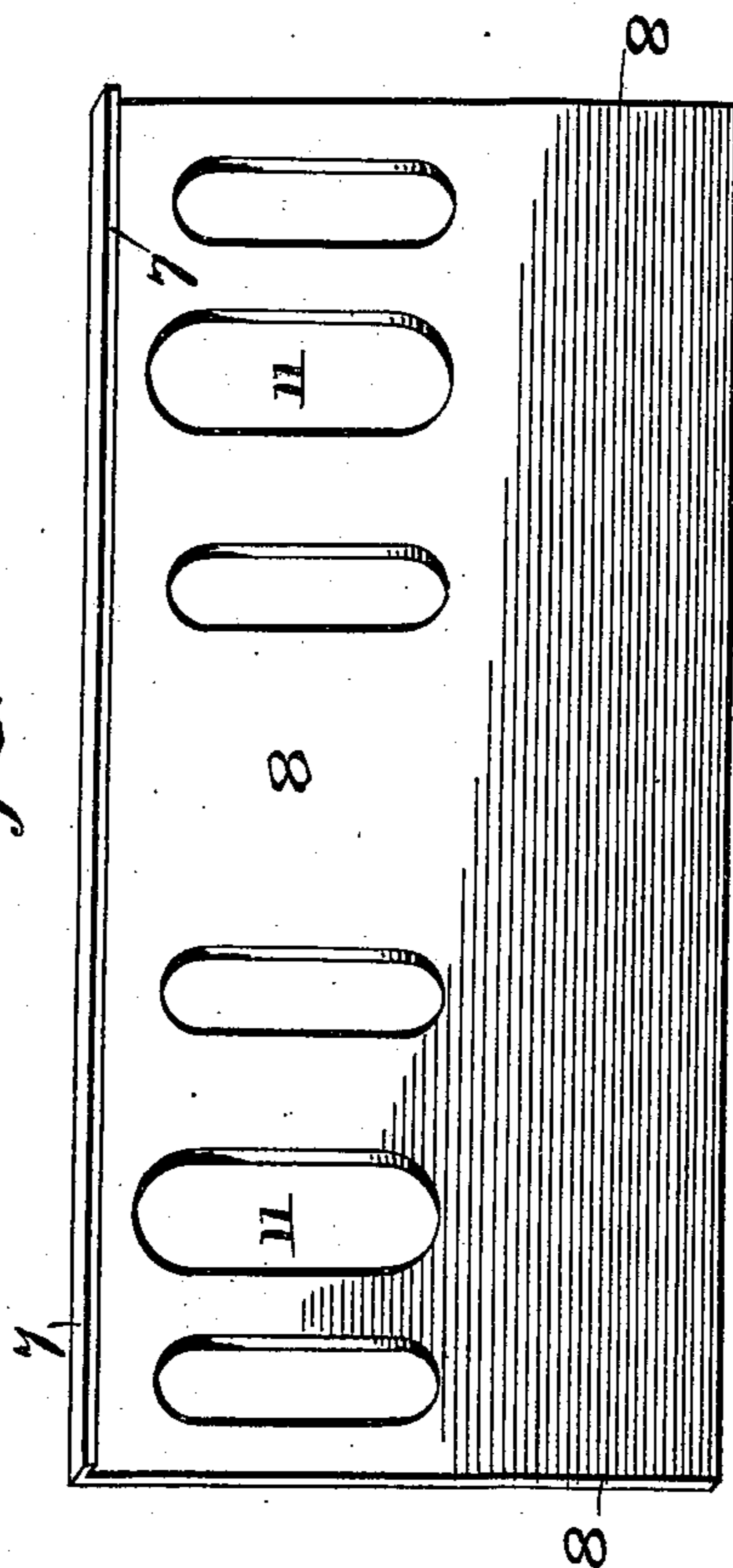


Fig. 8.



Witnesses:
Thos A. Green

Robert Everett

Inventor:

Caesar Hass.

By James L. Norris
Atty.

UNITED STATES PATENT OFFICE.

CAESAR HASS, OF LONDON, ENGLAND.

APPLIANCE FOR SCORING OR GROOVING WOOD.

SPECIFICATION forming part of Letters Patent No. 552,435, dated December 31, 1895.

Application filed May 25, 1895. Serial No. 550,704. (No model.) Patented in England April 13, 1895. No. 7,491.

To all whom it may concern:

Be it known that I, CAESAR HASS, a citizen of the United States of America, and a resident of 261 Burdett Road, Limehouse, London, England, have invented a certain new and useful Improved Appliance for Scoring or Grooving Wood or other Material, (patented in Great Britain, No. 7,491, dated April 13, 1895,) of which the following is a specification.

10 The object of my invention is to construct a knife or multiple cutter for grooving or scoring wood in such a manner that the whole of the cutters can be kept in line with each other and be adjusted as to position for depth
15 of cut, and should one of the cutters be broken or damaged it can be easily removed and a new one substituted.

My invention will be clearly understood from the following description, reference being had to the annexed drawings, in which—

20 Figure 1 is a perspective view of the multiple-cutter appliance with the knives or cutters clamped in their respective positions. Figs. 2 and 3 are sections on the lines *a b* and
25 *c d* of Fig. 1, respectively, and showing the position the appliance occupies when applied to the slat of a machine (for manufacturing excelsior) of the kind sought to be patented by me under application for patent filed May
30 25, 1895, Serial No. 550,703. Fig. 4 represents side, back, and cross-section views of one of the cutters or knives; Fig. 5, part top view to more clearly illustrate the manner in which the knives are clamped. Fig. 6 is an
35 inside perspective view of the back clamping-plate. Fig. 7 is an inside perspective view of the front clamping-plate; Fig. 8, a perspective view of the adjusting-plate.

40 The multiple cutter, groover or scorer is constructed with two plates 1 2, each having at equal distances apart a series of projecting walls 3 from a portion of the face thereof to form spaces or recesses 4 between for holding within these spaces a series of cutters 5, which
45 are each made with a notch 6 in one side for engaging a lip 7 of a plate 8, also arranged between the two grooved plates 1 2. The cutters 5 and lipped plate 8 are held between the two grooved plates 1 2 in a rigid manner
50 by screws 9, and the whole combined as one article is secured in position on the machine or tool by other screws J or clamping device.

The cutters 5 are formed with two opposite sides at an angle to each other so that the narrow portions can fit in corresponding shaped
55 recess 4 in one of the grooved plates 2, thereby forming a better seat and a more perfect contact with the grooved plates 1 2.

A portion of the lipped plate 8 projects beyond the grooved plates 1 2, and by loosening the screws 9 and actuating the lipped plate
60 8 the cutters 5 can be adjusted for depth of cut and also prevent any of the cutters 5 moving out of line in relation to each other should one of the cutters not fit the grooved plates
65 1 2 exactly tight.

The lipped plate 8 is slotted at 11 to enable the screws 9 connecting the two grooved plates 1 2 to pass through and also to allow of adjustment of the cutters 5 without removing
70 the screws 9.

The cutters 5 may be of any width and shape to suit the purpose intended.

By forming the cutters 5 in the manner shown the cutting-edge is always kept flat and
75 sharp, and as only the actual cutting-edge comes into contact with the wood under operation less friction heat is conveyed to the cutter, thus preserving the temper of the cutter
80 a much longer period than if the sides of the cutter were parallel.

My invention is applicable to any class of machine used for cutting, scoring or grooving wood, paper, metal and other material, but is specially adapted for use in machines used in
85 the manufacture of wood wool (excelsior) or fiber for making paper-pulp, also for making match-splints and spills. My invention can also be applied to planing tools and machines, and the cutting-edges of the multiple cutters
90 may be of any shape or design and may form one continuous straight or wavy line to suit the purpose intended.

What I claim, and desire to secure by Letters Patent, is—

95 1. The combination in a cutting tool, of two clamping plates having their adjacent faces at one end provided with a plurality of separated grooves, a plurality of cutters having grooved inner ends and arranged in said
100 grooves between the clamping plates, said cutters having sharpened outer ends projecting beyond the edges of the clamping plates, a separate plate clamped between the clamp-

ing plates and having a lip which engages the grooves in the inner end portions of the cutters, and screws for connecting the clamping plates together, substantially as described.

- 5 2. In a cutting tool, the combination of two clamping plates 1 and 2 having their adjacent faces at one end grooved as shown, a series of cutters 5, wedge shaped in cross-section arranged between said plates in said grooves,
10 said cutters having sharpened ends projecting beyond the edges of said clamping plates and provided at their opposite ends with

grooves 6, a plate 8 adjustably arranged between said clamping plates and provided with a lip 7 engaging the grooves in said cutters, 15 and screws 9 for clamping said plates together, substantially as described.

In witness whereof I have hereto signed my name, in the presence of two subscribing witnesses, this 6th day of May, 1895.

CAESAR HASS.

Witnesses:

RICHARD COXE GARDNER,
JAMES RIDGEWAY.