

No. 684,142.

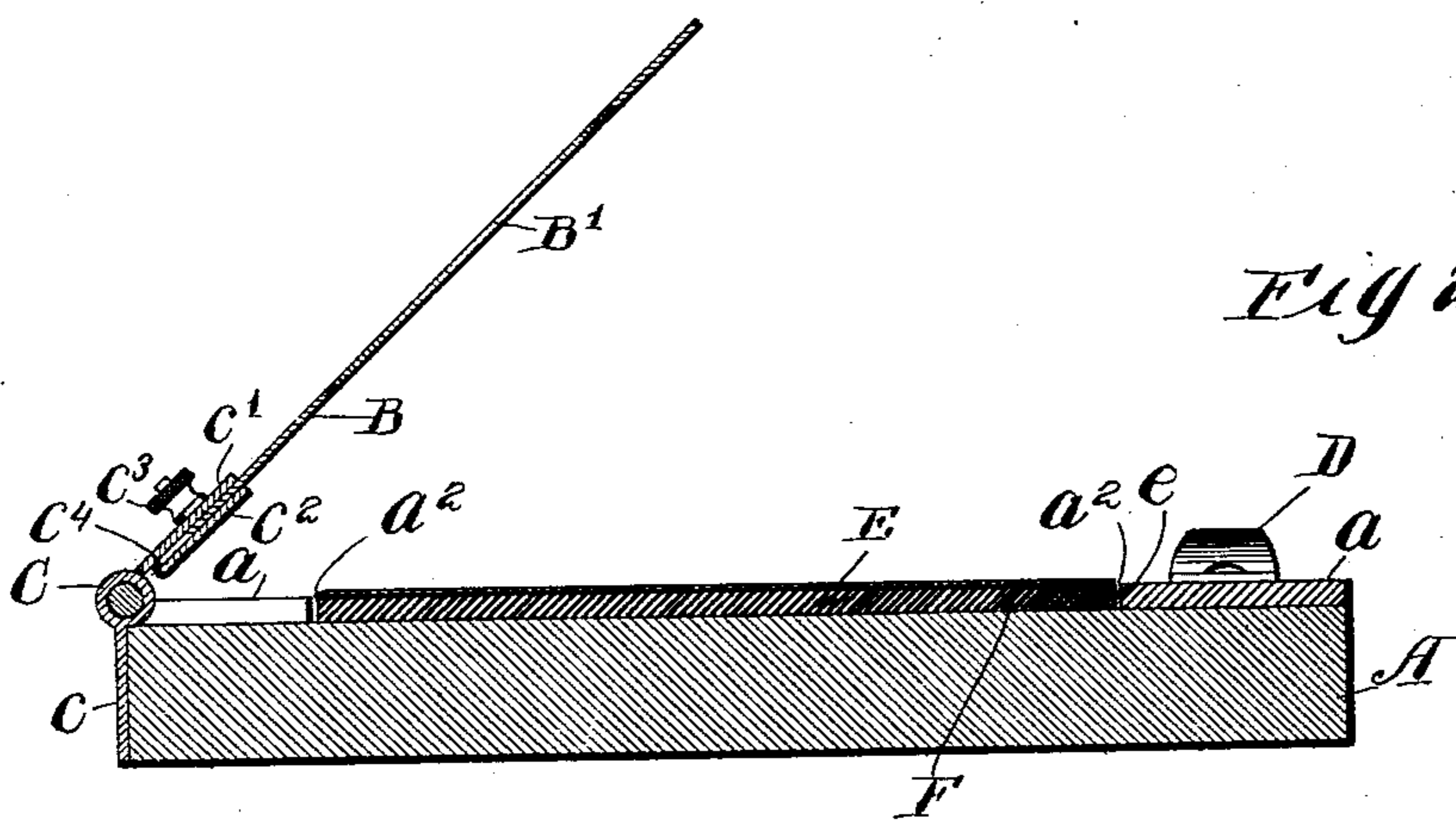
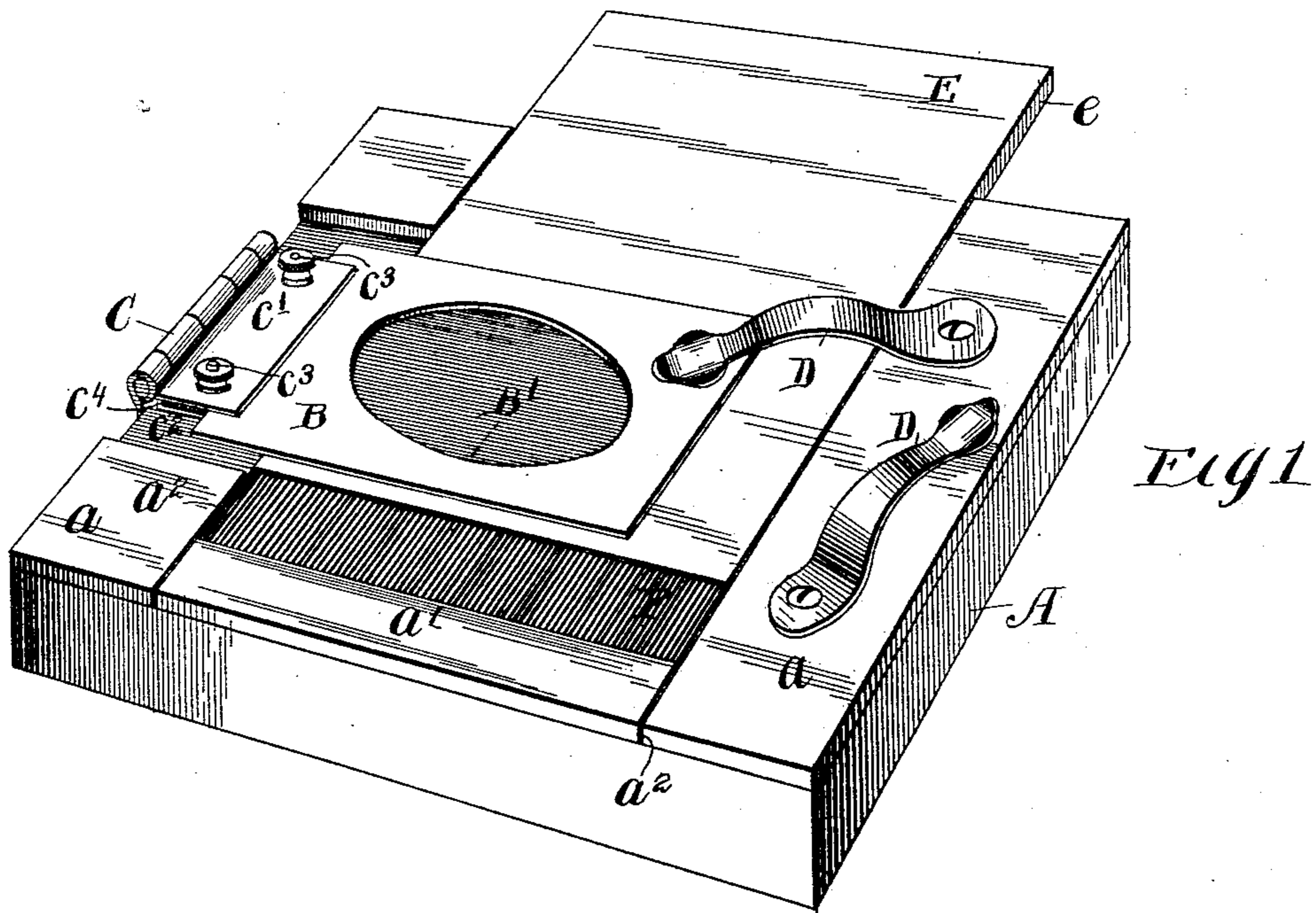
Patented Oct. 8, 1901.

G. B. WARD.

DEVICE FOR HOLDING PHOTOGRAPHIC PRINTS WHILE BEING CUT.

(Application filed Nov. 14, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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DEVICE FOR HOLDING PHOTOGRAPHIC PRINTS WHILE BEING CUT.

SPECIFICATION forming part of Letters Patent No. 684,142, dated October 8, 1901.

Application filed November 14, 1900. Serial No. 36,461. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. WARD, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Devices for Holding Photographic Prints While Being Cut; and I do hereby declare that the following is a full, clear, and exact description thereof, reference
10 to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a novel device designed for photographers' use to hold photographic prints while they are being cut or
15 trimmed to the desired conformation preparatory to mounting the same.

A device embodying my invention embraces generally a base upon which the prints are supported while being cut and means for
20 securing to said base a pattern-plate used in connection with a cutting-tool to give a desired form, such as a round or oval, to the print being cut.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a device made in accordance with my invention. Fig. 2 is a central vertical section thereof with the pattern-plate swung
30 upwardly.

As shown in said drawings, A designates a generally rectangular base-block, which may be made of wood or like material; B, a pattern-plate, and C a hinged clamp by means of which
35 the pattern-plate may be united by a hinged or pivotal connection to the base in a manner to swing vertically toward and away from the cutting-surface of the base and whereby the
40 print may be held by being clamped between the pattern-plate and the base. Said plate is provided with a pattern-opening B' of the shape which it is desired to give to the finished print. As herein shown said pattern-
45 opening is oval in form, but may be varied to produce different-shaped prints. The inner edge of said plate, surrounding said opening, constitutes a guide to direct the cutting-tool, which may be a knife or revolving cutter.

50 D D designate clasps which are adapted to engage the free edge of the pattern-plate to

hold the same in its clamping position. Said clasps desirably engage the pattern-plate with a yielding pressure and for this purpose are made of spring metal and pivoted to the block
55 to swing in a horizontal plane toward and from the pattern-plate. Obviously the same yielding effect would be produced by placing the clasps under the influence of springs. Two clasps are herein shown, one engaging the pattern-plate to hold it in its clamping position
60 and the other swung outwardly away from said plate. In practice a number of pattern-plates of different sizes, such as are commonly supplied for the purpose stated, will be used
65 in connection with the base and its hinged clamp, and either of said plates may be inserted in the said clamp, as desired. One of the clasps C is ample to hold the smaller pattern-plate in its clamping position; but for
70 the larger plates two clasps will desirably be used, one engaging the plate near each corner thereof. The margins of said clasps, at the ends thereof, are curved upwardly to permit the same to slide readily over the plate. 75

The hinged clamp C illustrated is like a butt-hinge, one leaf c of which is permanently attached to the edge of the block A and the other leaf c' of which engages the adjacent edge of the pattern-plate and constitutes one
80 of a pair of clamping members, between which the edge of the pattern-plate is clamped. The other clamping member in the device shown consists of a loose plate c², which is connected with the leaf c' of the hinge by means of
85 clamping-studs c³, attached rigidly to the loose plate c², which extend through apertures in the adjacent leaf of the hinge, and are provided outside of said leaf with screw-threaded thumb-nuts, by which said leaf and
90 plate are clamped together. In order to insure the proper clamping engagement of the outer edges of the clamping members with the pattern-plate, the rear edge of the loose clamping-plate is provided with a flange c⁴,
95 which is directed toward and engages the inner surface of the leaf c' of the hinge. This construction acts to bring the said plate substantially parallel with the leaf of the hinge, so as to increase the bearing-surface between
100 the clamping-plate and pattern-plate.

The cutting-surface of the base A is made

shiftable in order to prevent said surface from becoming quickly injured by repeated contacts of the cutting-tool with the same parts thereof. In this instance said cutting-
 5 surface consists of removable and shiftable plate E, upon which the print to be cut or formed is laid. Said plate is desirably made of soft metal, such as zinc or the like, and is supported directly upon a yielding layer or
 10 pad F of rubber or like material. Said yielding pad F is of a size slightly greater than the largest size of pattern-opening B' of the plate B to be used therewith.

In order to provide means for holding the
 15 cutting-plate E in place, said plate is provided on one edge thereof with a downturned flange e, which is adapted to engage either one of two grooves a^2 in the top surface of the base at either side of the cutting-bed. Preferably
 20 and as herein shown said grooves are formed between the side margins of the yielding layer or pad F and strips a applied to the base at either side of said pad. Two of said grooves are provided in order that said cutting-sur-
 25 face plate may be turned end to end to present different surfaces thereof to the action of the cutting-tool. Preferably, also, transverse strips a' are attached to the base at the ends of the cutting-bed, said strips being
 30 flush with the layer or pad F and serving to support the ends of the shiftable plate which extend beyond said pad. The axis of the hinge C is by preference located slightly below the level of the cutting-surface of the
 35 plate E when the parts are assembled, so as to insure clamping action between all parts of the pattern-plate and the cutting-surface when the free edge of the pattern-plate is pressed down against the cutting-bed either
 40 by the hand or by the clasps D.

Heretofore it has been the practice in cutting or trimming photographic prints to give proper form thereto preparatory to mounting to clamp the print between a form or pattern
 45 plate such as herein shown and a cutting block or base by hand-pressure. This method of cutting the print requires considerable skill on the part of the operator in order to prevent the print or pattern-plate from slipping during the cutting or trimming operation. Moreover, in case of large print it is often necessary for the person doing the cutting or trimming to employ the services of another person or helper to aid in holding
 55 the print in place while being cut or trimmed. With my construction, on the other hand, the print is mechanically clamped or held in place during the cutting operation either by pressure of one hand on the free edge of the
 60 pattern-plate or by the clasps D, and in the latter case both hands of the operator will be left free to manipulate the cutting-tool. When the pattern-plate is held at its free edge by the hand and the clasps are not used,
 65 the device will operate equally well to forcibly hold the print, it being obvious that, inasmuch as the pattern-plate is held positively

from lateral or sidewise motion through its attachment to the hinged clamp, no displacement of the print is liable to occur in the cutting operation when the pattern-plate is so held. Moreover, by the use of the device herein shown special skill is not required in order to accurately cut or trim the print, and such work may be done with economy of labor. 75

A further advantage of the device described is that the work may be done much more rapidly than by the method heretofore practiced and with greater ease to the person doing the work, it being obvious that the pattern-plate when held in the hinged clamp, as described, may be easily and quickly lifted or thrown back from the base in removing and inserting the prints and that the prints may be quickly adjusted to the proper position beneath the plate, because the weight of the plate alone or a slight pressure thereon will loosely confine the print while being adjusted to its proper place and stronger pressure of the hand or the use of the clasps will
 80 thereafter immovably clamp and hold the print while being cut. 85 90

It will be understood that the soft-metal plate E is made thin enough to possess some flexibility, so that the pressure of the cutting-
 95 tool thereon causes the plate to be slightly depressed into the cushioning pad or layer at the point of contact of the tool. The result of this construction is that the cutting edge of the tool is depressed slightly below
 100 the general level of the plate E, so that a sharp clean cut is assured.

A further advantage of the yielding cutting-bed is that it permits the print to be more effectively clamped in place than would
 105 be true if such bed be rigid.

The purpose of the soft-metal plate constituting the cutting-surface of the bed is to prevent the dulling of the cutting-tool by having the same brought into cutting contact with a hard surface. The shifting of the plate in the manner described enables all parts of the same to be brought under the cutting-tool and all parts to receive equal wear, thereby effectively avoiding a possible
 115 objection to a soft-metal cutting-bed.

I claim as my invention—

1. A device for the purpose stated comprising a soft-metal shiftable plate forming the cutting-surface of the base, a cushioning layer
 120 interposed between the cutting-plate and the base, and a hinged clamp attached to the base and having clamping-jaws adapted to detachably engage one margin of an apertured pattern-plate. 125

2. A device for the purpose stated comprising a base, a hinged clamp attached to the base and having clamping-jaws adapted to detachably engage one edge of an apertured pattern-plate, and means adapted to engage
 130 the opposite or free edge of said pattern-plate for clamping the same upon the base.

3. A device for the purpose stated comprising a base, a hinged clamp attached to said

base and having clamping-jaws adapted to detachably engage one edge of an apertured pattern-plate, and a spring-clasp on the side of the base opposite to the clamp adapted for engagement with the other or free edge of said pattern-plate.

4. A device for the purpose stated comprising a base provided with a shiftable cutting-bed, a clamp having hinged connection with said base at one side of said cutting-bed and adapted to detachably engage one edge of an apertured pattern-plate, and a spring-clasp on the base at the opposite side of said cutting-bed adapted to engage the free edge of said pattern-plate.

5. A device for the purpose stated comprising a base, a yielding cutting-bed, means attached to said base at one side of said bed for detachably engaging one edge of an apertured pattern-plate, and a yielding clasp on the opposite side of the base adapted for engagement with the other or free edge of said pattern-plate.

6. A device for the purpose stated comprising a base, a soft-metal shiftable plate forming the cutting-surface of the base, means located at one side of said base for detachably engaging one edge of an apertured pattern-plate, and a yielding clasp on the other side of said base adapted to engage the opposite or free edge of said pattern-plate.

7. A device for the purpose stated comprising a base, a soft-metal shiftable plate forming the cutting-surface of the base, a cushioning layer interposed between the cutting-plate and the base, means located on the base at one side of said cutting-surface for detachably engaging one edge of an apertured pattern-plate, and a clamp located on the base at the other side of said cutting-surface adapted to engage the opposite or free edge of said pattern-plate.

8. A device for the purpose stated comprising a base, means for securing a pattern-plate upon the base, and a soft-metal plate forming the cutting-surface of the base, said plate being provided with a flange adapted for engagement with a groove in the base.

9. A device for the purpose stated comprising a base, means for securing a pattern-plate to the base and a soft-metal plate forming the

cutting-surface of the base, said plate being flanged and the base being provided with two parallel grooves to receive the flange on the bed.

10. A device for the purpose stated comprising a base provided with a cutting-bed consisting of a yielding cushion and a flexible soft-metal plate thereon constituting the cutting-surface, and a hinged clamp attached to the base and having clamping-jaws adapted to detachably engage one margin of an apertured pattern-plate.

11. A device for the purpose stated comprising a base provided with a cutting-bed comprising a yielding cushion, and a flexible metallic plate constituting the cutting-surface, means located on one side of the base for detachably engaging one edge of an apertured pattern-plate, and clamping means located on the other side of said base and adapted for engagement with the opposite or free edge of said pattern-plate.

12. A device for the purpose stated comprising a base provided with a cutting-bed consisting of a yielding cushion, and a flexible soft-metal plate constituting the cutting-surface of the bed and shiftable thereon, means located at one side of the base for detachably engaging one edge of an apertured pattern-plate, and clamping means located on said base adapted to engage the other or free edge of said pattern-plate.

13. A device for the purpose stated comprising a base provided with a cutting-bed consisting of a yielding cushion and a flexible metallic plate constituting the cutting-surface, and a clamp hinged to the base at one side of the bed having clamping-jaws adapted to detachably engage one margin of an apertured pattern-plate, the axis of the hinge of said clamp being located below the plane of the cutting-surface of said bed.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 30th day of October, A. D. 1900.

GEORGE B. WARD.

Witnesses:

WILLIAM L. HALL,
GERTRUDE BRYCE.