No. 839,177.

PATENTED DEC. 25, 1906.

DE WITT S. MOSES & H. P. HAMILTON.

COPY HOLDER.

APPLICATION FILED JULY 17, 1905.

Fig. 1.

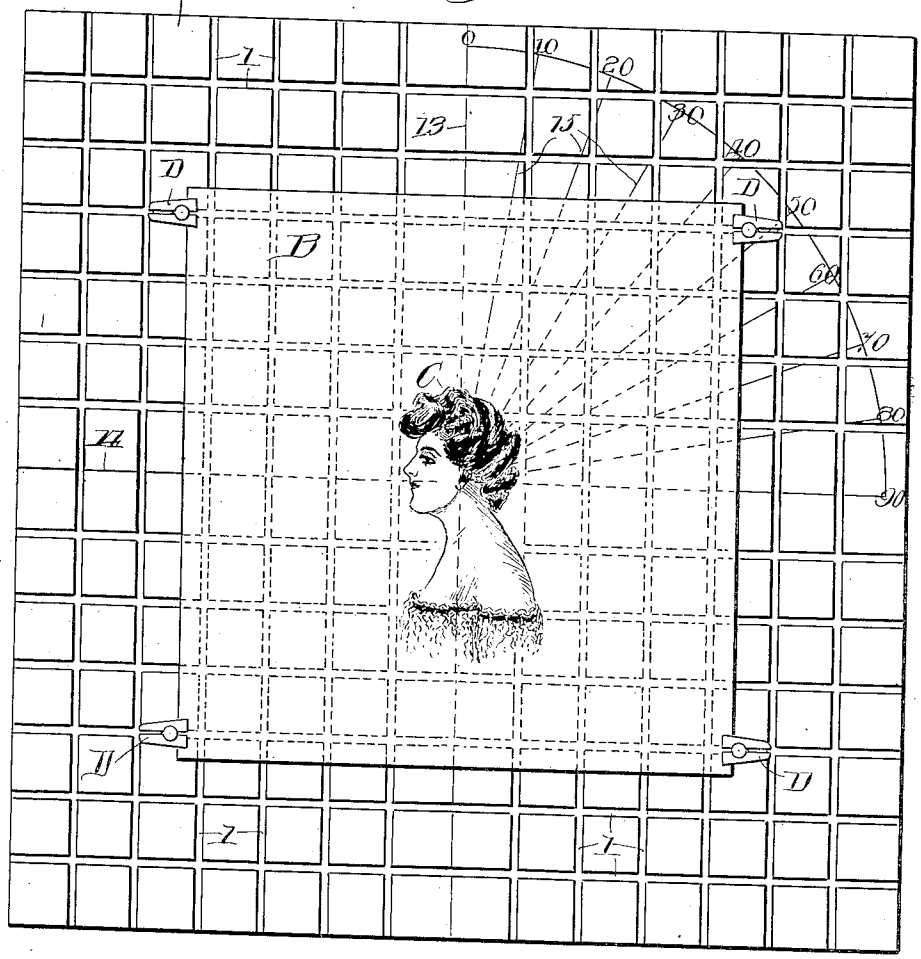


Fig. 2.

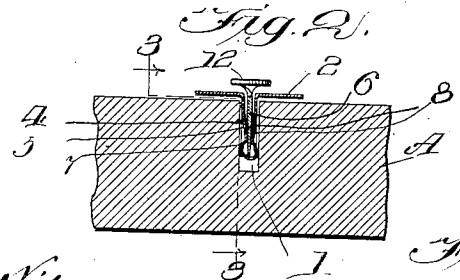


Fig. 3.

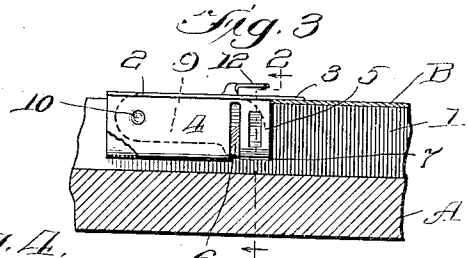
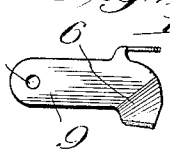


Fig. 4.



Witnesses:

H. S. Gaither

Charles B. Gillson.

Inventors:

De Witt S. Moses and
Henry P. Hamilton
by Wm. E. Waldo,
Attorney

UNITED STATES PATENT OFFICE.

DE WITT S. MOSES, OF OSHKOSH, AND HENRY P. HAMILTON, OF TWO RIVERS, WISCONSIN, ASSIGNORS TO THE HAMILTON MANUFACTURING COMPANY, OF TWO RIVERS, WISCONSIN, A CORPORATION OF WISCONSIN.

COPY-HOLDER.

No. 839,177. Specification of Letters Patent. Patented Dec. 25, 1906.

Application filed July 17, 1905. Serial No. 270,008.

To all whom it may concern:

Be it known that we, DE WITT S. MOSES, a resident of Oshkosh, Winnebago county, and HENRY P. HAMILTON, a resident of Two Rivers, Manitowoc county, Wisconsin, citizens of the United States, have invented certain new and useful Improvements in Copy-Holders, of which the following is a specification.

This invention relates to copy-holders for photographers' use in photographing pictures, drawings, and other copy in making cuts or engravings thereof.

The primary object of the invention is to avoid the mutilation and disfigurement of the sheets containing the picture, drawing, or other copy of which it is desired to make a cut or engraving, due to the use of thumb-tacks or similar means for securing said sheet to the copy-holder in the manner now common.

To this end our invention consists of the various features, combinations of features, and details of construction hereinafter described and claimed.

In the accompanying drawings, in which a copy-holding board of our invention is fully illustrated, Figure 1 is a top plan view of a copy-holding board of our invention, showing a sheet containing a picture of which it is designed to make a cut or engraving secured thereon. Fig. 2 is a sectional view, on an enlarged scale, taken on the line 2 2 of Fig. 3. Fig. 3 is an enlarged plan section taken on the line 3 3 of Fig. 2, and Fig. 4 is an enlarged side view of the pivoted wedge for securing the clips which hold the sheet to the board.

Referring now to the drawings, A designates as a whole a copy-holding board of our invention, secured to which is a sheet B, containing a figure C which it is desired to photograph as a preliminary to making a cut or engraving thereof.

Formed in the upper surface of the copy-holding board A are series of grooves 1, preferably comprising grooves running in both directions parallel with the sides of said board. The grooves 1 may be located at any desired distance from each other, desirable intervals being about two inches, and to adapt said board for holding any size of copy up to the full size of the board grooves 1 are formed at intervals over the entire upper surface of said board.

The sheet B is adapted to be secured to the board A by means of clips D. The clips D are made of sheet metal, preferably steel, and comprise flat portions 2, disposed in the same plane, the forward ends of which form lips 3, adapted to project over and engage the edges of the sheet B, said flat portions 2 being connected in the rear of the lips 3 by means of a tongue 4, adapted to engage the grooves 1 of the copy-holding board A and formed by striking down the central portion of the plate from which said clip is made. The clips D are adapted to be secured in the grooves 1 of the copy-holding board A by means of spring-fingers 5 thereon, which are adapted to engage said slots 2 and to be forced outwardly into frictional engagement with the sides of said grooves by means of a suitable wedge 6.

In the preferable construction shown the extreme outer end of the spring-fingers 5 are bent outwardly, as shown at 7, so that as said spring-fingers are forced apart by the wedge 6 said outwardly-turned ends will be brought into strong frictional engagement with the sides of the grooves 2. Preferably, also, portions of the spring-fingers 5 are struck in to form downwardly-converging surfaces 8 on the adjacent sides of said spring-fingers 6, thereby increasing the wedging action of the wedge 6. In the preferable construction shown, also, the wedge 6 is formed at the forward end of a lever 9, pivoted at its rear end between the sides of the tongue 4. Convenient means for pivoting said lever 9 to the tongue 4 consist in striking up pintles 10 on the inner surfaces of the sides of said tongue, which are adapted to engage a hole 11, formed in the lever 9.

To provide for conveniently operating the wedge-lever 9, said lever is provided adjacent to its forward end with what may be described as a "thumb-plate" 12, which extends above the upper surfaces of the flat portions 2 of said clip, the relation being such that an unobstructed space will be left beneath said thumb-plates to provide for inserting a claw or the like beneath said thumb-plates to disengage the wedge 6.

In the preferable construction shown a degree-scale is formed on the board A, said degree-scale comprising lines 13 and 14, which intersect at the center of said board, and any desired number of intermediate

lines 15, which subdivide the right angle between the lines 13 and 14 into smaller angles—as shown into angles of ten degrees.

The lines 13 and 14 are very convenient, first, in locating the focus of the camera, and, second, in setting the copy, while the intermediate lines 15 are for use in setting the copy in the different positions in which it must be set in three-color work for the purpose of breaking the screen-lines, also for placing or setting a half-tone to break the screen-lines when photographing the same for a recopy.

We claim as our invention—

1. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising lips adapted to extend over the edges of the copy, spring-fingers adapted to engage the grooves in said copy-holding board, and a wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

2. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising lips adapted to extend over the edges of the copy, spring-fingers adapted to engage the grooves in said copy-holding board and a pivoted wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

3. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising lips adapted to extend over the edges of the copy, spring-fingers, the outer ends of which are turned outwardly and a wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

4. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising lips adapted to extend over the edges of the copy, spring-fingers, the outer ends of which are turned outwardly, and a pivoted wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

5. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising lips adapted to extend over the edges of the copy, spring-fingers provided with downwardly-converging surfaces on their adjacent sides and a wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

6. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising lips adapted to extend over the edges of the copy, spring-fingers, the outer ends of which are turned outwardly and which are provided with downwardly-converging surfaces on their adjacent sides and a wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

7. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising lips adapted to extend over the edges of the copy, spring-fingers, the outer ends of which are turned outwardly and which are provided with downwardly-converging surfaces on their adjacent sides and a pivoted wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

8. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising flat sections, lips at the forward ends thereof, a tongue which connects the flat sections of said clip in the rear of said lips adapted to engage the grooves in said copy-holding board and a wedge for forcing said spring-fingers outwardly into engagement with the sides of said grooves.

9. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising flat sections, lips at the forward ends thereof, a tongue which connects the flat sections of said clip in the rear of said clips adapted to engage the grooves in said copy-holding board, spring-fingers adapted to engage the grooves in said copy-holding board, a lever pivoted between the sides of the tongue connecting the flat sections of said clip and a wedge thereon adapted to force said spring-fingers outwardly into engagement with the sides of the grooves in said board.

10. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface and means for securing a sheet thereto, said means consisting of a clip comprising flat sections, lips at the forward ends thereof, a tongue which connects the flat sections of said clip in the rear of said lips adapted to engage the grooves in said copy-holding board, spring-fingers adapted to engage the grooves in said copy-holding board, a lever pivoted between the sides of the tongue connecting the flat sections of said clip, the forward end of said lever forming a wedge adapted to force said spring-fingers outwardly into engagement with the sides of the grooves in said board

and an operating thumb-plate on the forward end of said wedge-lever.

11. In a copy-holding device, the combination of a copy-holding board provided with grooves in its upper surface, a clip adapted for engagement with the grooves in said copy-holding board, means to secure said clip in said grooves, and lips on said clip adapted to extend over the edges of the copy-holding machine.

12. A clip comprising flat sections, lips thereon, an intermediate tongue connecting said sections, spring-fingers and a wedge for forcing said spring-fingers outwardly.

13. A clip comprising flat sections, lips thereon, an intermediate tongue connecting said sections, spring-fingers and a pivoted wedge for forcing said spring-fingers outwardly.

14. A clip comprising flat sections, lips thereon, an intermediate tongue connecting said sections, spring-fingers, the outer ends of which are turned outwardly and a wedge for forcing said fingers apart.

15. A clip comprising flat sections, lips thereon, an intermediate tongue connecting said sections, spring-fingers the outer ends of which are turned outwardly and a pivoted wedge for forcing said fingers apart.

16. A clip comprising flat sections, lips thereon, an intermediate tongue connecting said sections, spring-fingers provided with downwardly-converging surfaces on their adjacent sides and a wedge for forcing said spring-fingers apart.

17. A clip comprising flat sections, lips thereon, an intermediate tongue connecting said sections, spring-fingers, the outer ends of which are turned outwardly and which are provided with downwardly-converging surfaces on their adjacent sides and a pivoted wedge for forcing said spring-fingers apart.

18. A clip comprising flat sections, lips thereon, a tongue which connects the flat sections of said clip, spring-fingers, a lever pivoted between the sides of the tongue connecting the flat sections of said clip and a wedge thereon adapted to force said spring-fingers apart.

19. A clip comprising flat sections, lips thereon, a tongue which connects the flat sections of said clip, spring-fingers the outer ends of which are turned outwardly and which are provided with downwardly-converging surfaces on their adjacent sides and a lever pivoted between the sides of the tongue connecting the flat sections of said clip adapted for insertion between the converging surfaces of said spring-fingers.

In testimony whereof I affix my signature, in presence of two subscribing witnesses, this 24th day of June, A. D. 1905.

DEWITT S. MOSES.

Witnesses:
JOY L. FRINK,
H. C. GOWRAN.

In testimony whereof I affix my signature in presence of two subscribing witnesses this 29th day of June, A. D. 1905.

HENRY P. HAMILTON.

Witnesses:
H. C. GOWRAN,
S. I. CADY.