

932,879.

A. MAY.
SANDPAPERING PLANE.
APPLICATION FILED FEB. 26, 1909.

Patented Aug. 31, 1909.

Fig. 1.

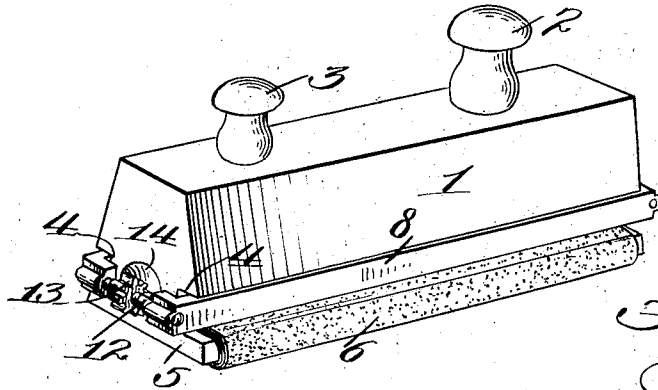


Fig. 2.

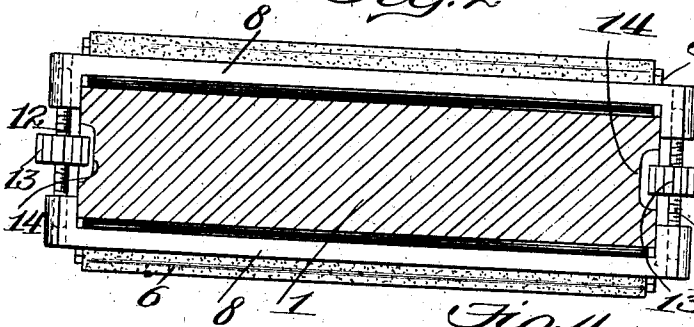


Fig. 3.

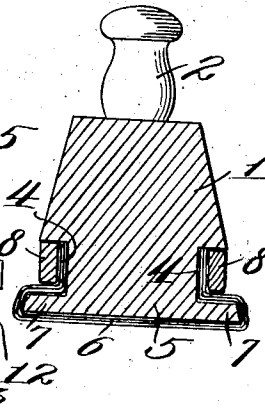


Fig. 4.

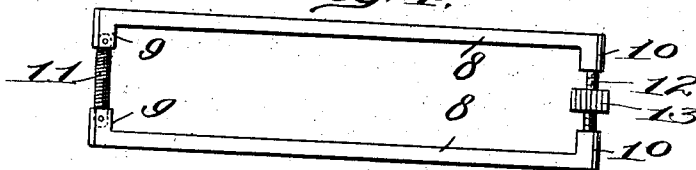


Fig. 5.

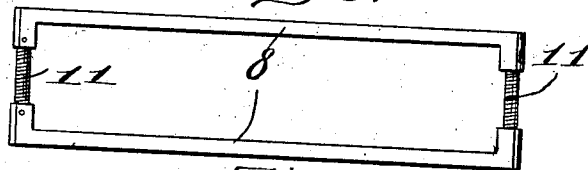
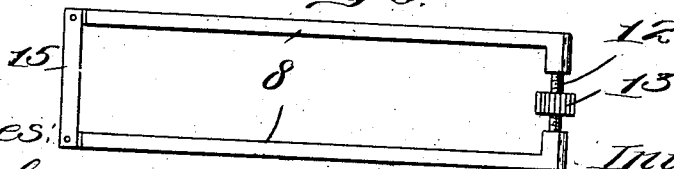


Fig. 6.



Witnesses:
C. D. Kessler
F. B. Kessler

Inventor
Augustus May
By *James L. Norris*

UNITED STATES PATENT OFFICE.

AUGUSTUS MAY, OF NEW ORLEANS, LOUISIANA.

SANDPAPERING-PLANE

932,879.

Specification of Letters Patent.

Patented Aug. 31, 1909.

Application filed February 26, 1909. Serial No. 480,228.

To all whom it may concern:

Be it known that I, AUGUSTUS MAY, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Sandpapering-Planes, of which the following is a specification.

This invention relates to new and useful improvements in sand papering planes and it pertains generally to a structure of that type which comprises a body and means for clamping several sheets of sand paper upon the under face thereof.

The primary object of the invention is to provide a sand papering plane in which parts may be instantly manipulated to permit of the removal or insertion of new sheets without the necessity of dismantling the structure and in which when the outermost sheet has become worn it may be torn away, exposing the next adjacent sheet, and in this manner dispensing with the necessity of operating any of the parts to expose a new planing surface.

The above are the primary objects of the invention but in addition to these, the structure has been devised with a number of collateral objects in view, chief of which is the provision of a sand papering plane by means of which great pressure can be put upon the material worked upon and a long sweeping stroke can at the same time be employed. In this manner the work can be accomplished efficaciously and the surface rubbed will have its finish uniform throughout.

The invention retains also the incidents of simplicity, inexpensiveness and strength and the structure is compact and neat in appearance.

In the accompanying drawings a preferred and advantageous embodiment of the invention is illustrated, the structural details of which are set forth at length in the following description while the novel features by which the invention is distinguished from the prior art are recited in language of the proper determinative scope in the claims appended at the end of the specification.

In the said drawings: Figure 1 is a perspective view of a sand papering plane constructed in accordance with the present invention. Fig. 2 is a horizontal sectional view thereof. Fig. 3 is a transverse sectional view thereof and Figs. 4, 5 and 6 are plan views showing different forms of

clamps for holding the sheets of paper upon the body of the plane.

Similar characters of reference refer to corresponding parts throughout the several views.

The body of the device is indicated by the numeral 1 and for convenience shall be hereinafter referred to as a block. The block 1 is preferably constructed of iron or otherwise weighted in order that material pressure may be placed upon the surface to be finished. For convenience, said block is provided on its upper side with two handles, as 2 and 3, the former being somewhat higher than the latter. The direction of the stroke of the plane may be readily controlled by turning the block with one handle and the pressure may be maintained by bearing down upon the other handle. The block 1 has its side faces formed with longitudinal grooves, as 4, which extend the entire length of said block and which define with the lower portion of the block a substantially inverted T-shaped head, as 5. The grooves 4 are preferably of rectangular form with sharp corners and straight sides in order that the sheets of paper, as 6, may be more readily clamped therein and more firmly held against displacement. The sheets 6 are clamped upon the T-shaped head 5, the side portions of said sheets being bent around the projecting flanges 7 of said head, and being then fitted conformably in the grooves 4 wherein they are held by a suitable clamping device, as illustrated in Fig. 4, and which comprises flat sided bars, preferably of rectangular cross section, as 8, each of which fits in one of the grooves 4. The bars 8 have inwardly extended end lugs, as 9 and 10, the lugs 9 being connected by a retractile spiral spring, as 11, and the lugs 10 having threaded recesses or openings to receive the oppositely threaded end portions of an adjusting screw, as 12, the latter having an enlarged milled intermediate finger portion, as 13. The bars 8 are fitted in the grooves 4 in the manner shown in Figs. 2 and 3, the lugs 9 and 10 overlying the ends of the block 1 and holding said bars against axial movement. The spring 11 holds the bars against lateral movement at one end of the block and the bolt 12 holds them against lateral movement at the other end of the block.

In Fig. 2 instead of one bolt 12 and the spring 11, I have shown two bolts 12. In the

constructions wherein the bolts 12 are employed, the block 1 has its end faces formed with recesses, as 14, which accommodate the inwardly projecting portion of the finger piece 13.

In Fig. 5 I have shown an arrangement in which, instead of a bolt 12 at one end of the clamp structure, as in Fig. 4, a spring 11 has been employed, two of such springs, of course, being used in the embodiment of Fig. 5.

In Fig. 6 a bolt, as 12, is employed at one end of the clamp structure and at the other end thereof a connecting bar or link, as 15, is provided, such bar or link being pivoted to the ends of the bars 8.

In using the clamp structure shown in Fig. 2, the sheets of paper are fitted in position in the manner stated and as shown more particularly in Fig. 3 and the bars 8 are then fitted in the grooves 4 and over the portions of the sheets 6 therein. The bolts 12 are then turned to draw the bars 8 toward one another and the sheets 6 are thus efficiently clamped in position. When it is desired to renew the supply of sheets the bolts 12 are manipulated to move the bars 8 away from one another as far as may be necessary for the insertion of new sheets. When one sheet 6 has been worn out, it is severed from its side portion at one side of the block by means of a pen-knife or other suitable instrument and it is then torn from its other side portion at the other side of the block, the sharp edges of the

bars 8 serving as efficient paper tearing edges in this connection. Obviously, in the use of the clamp structure shown in Fig. 4, the bolt 12 is manipulated to free the lugs 10 and the bars 8 are then sprung from the grooves 4. They are also sprung from said grooves in the form shown in Fig. 5; and in the form shown in Fig. 6 they are moved on their pivot connections so as to clear the walls of the grooves. Any one of these clamp structures will effectively hold several sheets of paper. The form shown in Figs. 4, 5 and 6 may be more readily removed from and assembled upon the block but greater clamping pressure may be had by the use of the form shown in Fig. 2.

Having fully described my invention, I claim:

In a sand papering plane, in combination, a block having longitudinal grooves in its side walls extending the entire length thereof, clamping bars fitted in said grooves and unattached to said block and means connecting the projecting end portions of said bars to permit of lateral movement thereof toward and away from one another.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

AUGUSTUS MAY

Witnesses:

ANDREW HEID,
JNO. J. WARD.