Jan. 15, 1963 R. A. PETIT 3,073,625

POSTING BOARD ASSEMBLIES

Filed Oct. 3, 1960 2 Sheets-Sheet 1

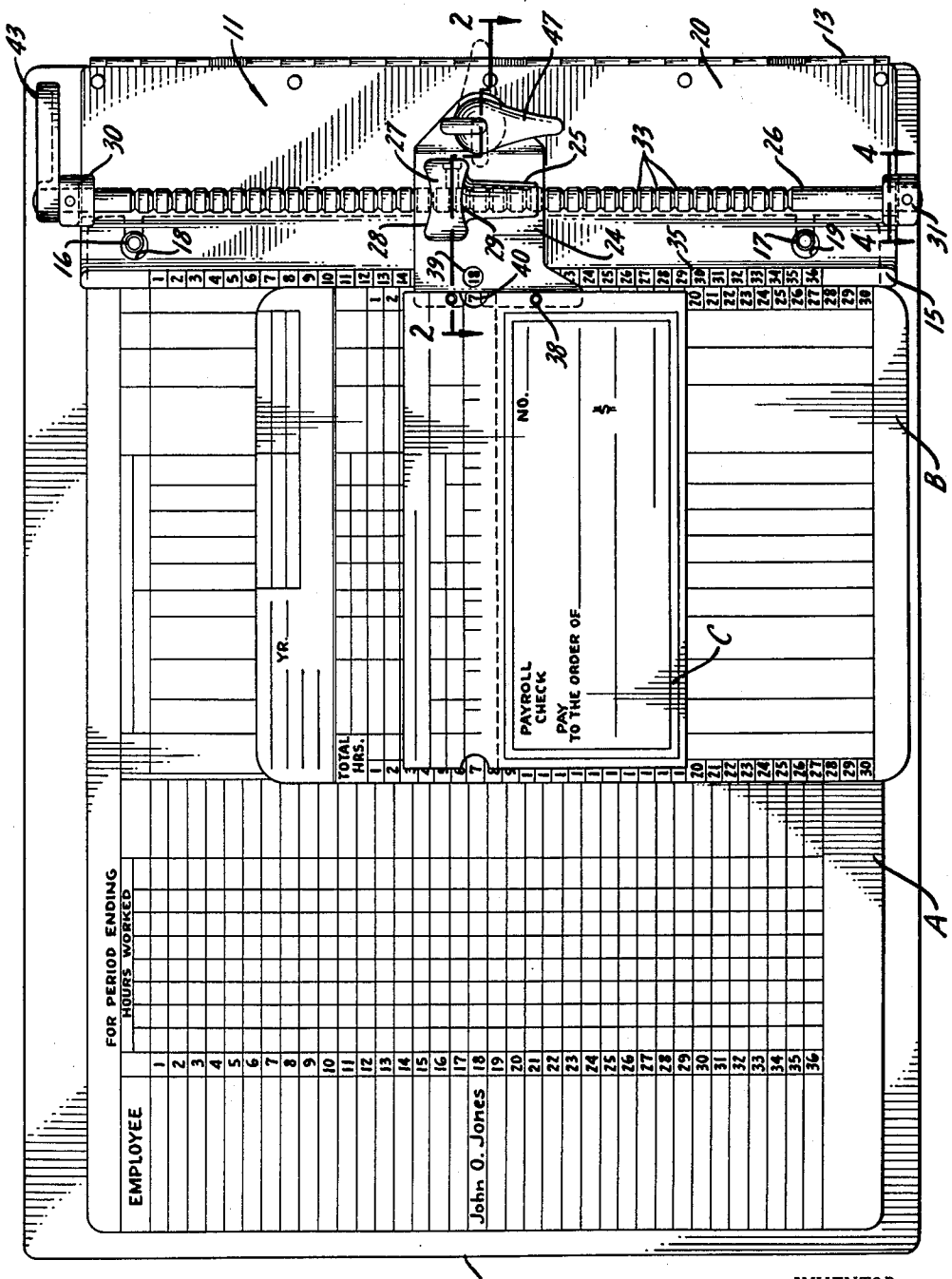


FIG. 1.

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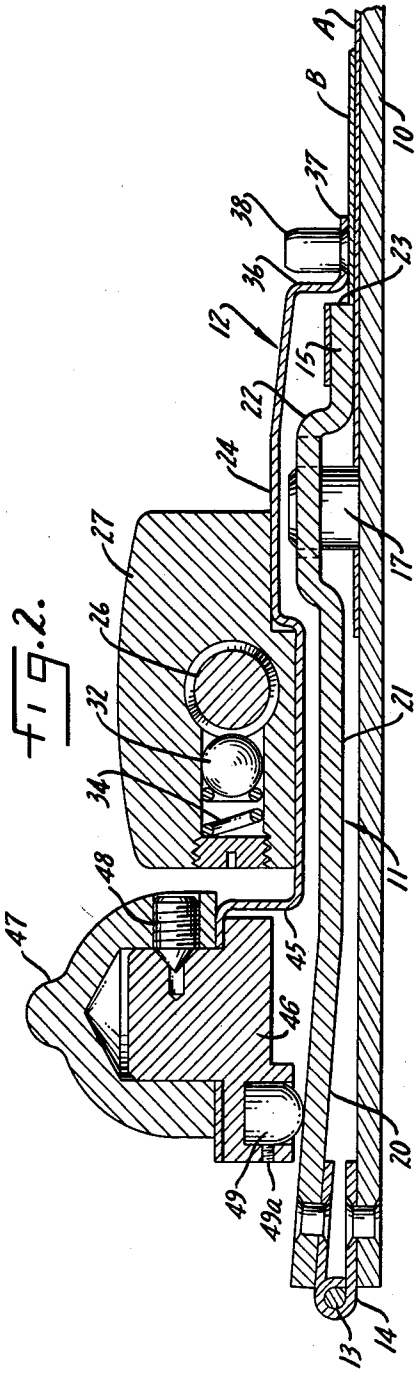


FIG. 2.

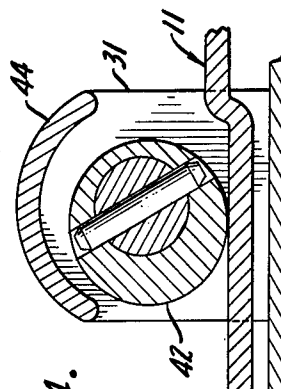


FIG. 4.

FIG. 3.

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POSTING BOARD ASSEMBLIES

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The present invention is directed to the art of posting board assemblies for use by accountants and bookkeepers in tabulating accounting information, such as payroll data.

Boards of this class have been in use for many years and customarily embody a main clamping member for clamping work sheets onto a backing board or base, a second clamping member which is adjustably positioned along the main clamping member for holding additional sheets on top of the sheets held by the main clamping member, and some indexing system to aid the user in the alignments of the several superimposed sheets and in the proper tabulation of data. Examples of this general class of posting board are found in Strauss Patent No. 2,338,553, Page Patent No. 2,338,532, and Strauss Patent No. 2,638,360.

A major purpose of the present invention is the provision of posting board clamping facilities which positively hold superimposed sheets on the board, which minimize the tendency for the sheets to work out of alignment with one another, which prevents release of the clamps by accidental operator arm pressure resting on the clamping members, and which at the same time are easily releasable, at will, by the operator.

Other purposes of the present invention are to arrange a posting board of this general class so as to facilitate the handling of tabulating sheets carried by the board as to the insertion and removal of the same; to provide an assembly of low overall height so as to minimize interference with the hand of the user; and to provide a board of this class that is inexpensive to manufacture and yet highly rugged and durable in use; these and other purposes of the invention being more apparent from the following specification and claims, when taken with the accompanying drawings, in which:

FIGURE 1 is a plan view of the assembly of the present invention.

FIGURE 2 is a sectional view of the assembly in FIGURE 1, taken along the section lines 2—2 of FIGURE 1;

FIGURE 3 is an end view of the assembly illustrated in FIGURE 1, while omitting certain elements illustrated in FIGURE 1 for purposes of clarity; and

FIGURE 4 is a sectional view of certain elements illustrated in FIGURE 1 and taken on the section lines of 4—4 of FIGURE 1.

Like elements are designated by like characters throughout the specification and drawings.

With particular reference now to the drawings and in the first instance to FIGURE 1, 10 designates a posting board base, which as will be noticed in FIGURE 3 is of a flat form. The base 10 may be made from anodized aluminum or some other equivalent material. The lower surface of the base may be provided with a felt material so as to prevent sliding of the base along a desk or table top. Base 10 supports a main clamping member 11 and a secondary clamping member 12 at one side thereof.

The main clamping member 11 has a length corresponding substantially to the entire width of the base 10 as well be seen in FIGURE 1, and is hinged at one side

edge of base 10 as at 13. The hinge 13 includes conventionally formed hinge brackets which are fixed to the base 10 and main clamping member 11 by a suitable means. Coiled springs 14 are posited along the length of the hinge and may be coiled around the pintle of the hinge with the opposite ends of the springs engaged with the upper surface of the base 10 and lower surface of the main clamping member 11, as will be noted in FIGURES 2 and 3, thereby biasing the main clamping member 11 upwardly and in a direction away from the upper surface of base 10.

The inner end of the main clamping member 11 includes a flat clamping portion 15, which is adapted to bear against the base 10 and to clamp sheets to the base 10. The base 10 may include upstanding posts 16 and 17, which extend upwardly through enlarged apertures 18 and 19 in the main clamping member 11. The main clamping member 11, as will be noted in FIGURE 2, includes an outer portion 20 to which the hinge is fixed, and this outer portion is inclined relative to the general plane of the base 10. The main clamping member 11 includes an intermediate portion 21, which is adapted to be generally parallel to base 10 when the main clamping member 11 is in the downward or clamped position illustrated in FIGURE 2. The main clamping member includes an inner portion 22 which is downwardly offset in the region of the posts 16 and 17. The inner edge 23 of the portion 15 of the main clamping member is rectilinearly formed so as to provide an inner edge extending generally parallel to a line between the centers of the posts 16 and 17.

The secondary clamping member 12 includes a body 24 which may be of rigid sheet metal form and which is mounted for sliding and pivotal movement relative to the main clamping member 11 by means of a tubular bearing 25, which is slidably and rotatably mounted on a supporting rod 26. The tubular bearing 25 includes an upstanding handle portion 27 at one end thereof, which handle portion includes oppositely facing outwardly concave surfaces 28 and 29 so as to facilitate grasping of the handle portion by the operator and movement of the secondary clamping member along the rod 26. Rod 26 is rotatably supported in upstanding bearing posts 30 and 31 which are fixed to the base 10 at points outwardly of the main clamping member 11.

The secondary clamping member 12 and the supporting bearing 25 are adapted to be held at spaced intervals along the length of rod 26 by means of a ball 32 which is mounted in the handle portion 27 and biased inwardly into engagement with a selected one of the plurality of equally spaced grooves 33 in rod 26 by means of a spring 34. The tension of spring 34 is sufficient to force the ball 32 into a selected one of the grooves 33, while yet releasing against the action of spring 34 to allow sliding movements of the secondary clamping member along the main clamping member. The grooves 33 are spaced in accordance with the spacing of a numbered index on the outer end of the secondary clamping member 12, which index is designated at 35.

The inner end of the secondary clamping member includes a downwardly offset portion 36 and a flat clamping portion 37 which is adapted to bear against the base 10 in a generally parallel relation so as to securely clamp sheets therebetween. This end portion 37 of the secondary clamping member may include a plurality of up-

standing pegs 38 for the purpose of holding additional sheets thereon. The secondary clamping member may include an opening 39 which is positioned over the index strip 35 so as to enable the user to visually observe the position at which the secondary clamping member 12 is located. Similarly the clamping portion 37 may include a recess 40 to enable visual observation of index numbers positioned along the side of a sheet of paper held by the secondary clamping member.

In order to clamp the main clamping member 11 against the base 10, the rod 26 carries cams 42 at positions overlying the main clamping member 11 at the opposite ends thereof. These cams 42 are so formed that upon rotation thereof in one direction they bear against the surface of the main clamping member 11, as appears in FIGURE 4, and force the main clamping member 11 downwardly in tight clamping engagement with the base 10. Rotation of these camming members 42 in the opposite direction allows the main clamping member to raise away from the base 10 under the bias of springs 14. A relatively small mount of raising movement is provided, the lifting of the main clamping member being only slightly more than sufficient to enable easy movement of the edges of paper into and out of the space between the clamping portion of the main clamping member 11 and the base 10.

In order to rotate the rod 26 and cause a clamping engagement between the main clamping member 11 and base 10, a handle 43 is fixed to one end of the rod 26 at a position outward of the bearing post 30. This handle 43 includes an elongated portion extending transversely to the axis of rod 26, so that a relatively small amount of force applied to the outer end of the handle is sufficient to clamp the main clamping member 11 to the base 10.

The bearing posts 30 include overhanging cover portions 44 which face towards the finger portions 28 and 29. The cams 42 are positioned for abutting engagement with a secondary clamp 12 thereby providing a stop at each end of the rod. The cover portions 44, which overlie the camming members 42 are spaced upwardly therefrom, as is seen in FIGURE 4, only a distance sufficient to allow clearance between the high portion of the cams and the under surfaces of these portions.

Means are provided for forcing the secondary clamping member 12 downwardly against the base 10 and towards the main clamping member 11. The body 24 of the secondary clamping member is upwardly offset as at 45 and at the side of the bearing 25 opposite from the clamping portion 37. This upwardly offset portion is apertured to receive a rotatable camming member 46. A handle 47 is fixed to an upstanding portion of this camming member 46 as by means of a set screw 48. Thus the handle 47 and camming member 46 are rotatably secured on the offset portion 45. The lower portion of the camming member 46 is recessed to receive a depending pin 49, which is confined between the recess and the inclined portion 20. A set screw 49*a* may hold pin 49 in position. The center of gravity of the clamp 12 with its locking assembly is located outwardly of rod 26, so that when handle 47 is released, the clamping end of clamp 12 raises from the paper held thereby by the force of gravity.

In using the board of the present invention, the operator starts with the handle 47 in the released position, which is the position illustrated in dotted outline in FIGURE 1, and with the handle 43 in the released position, as is indicated in dotted outline in FIGURE 3. In that positon, the main clamping member 11 is biased upwardly away from base 10 and the secondary clamping member 12 is biased upwardly from the base 10 and the secondary clamping member 11 due to the offset center of gravity thereof. The operator may then insert posting sheets A, which may take the form of employee payroll summary sheets beneath the main clamping member 11 and with the apertures at the sides of the sheets fitted over the posts 16 and 17. The operator may then, with a simple hand movement, force the handle 43 downwardly which rotates the cams 42 and forces the main clamping member 11 down against the base 10, thereby clamping the summary sheets on the base 10. Other posting sheets B may then be inserted beneath the clamping portion 37 of the secondary clamp 12 and with the edge thereof bearing against the edge 23 of the main clamp 11. Locking handle 47 is then moved to the full line position of FIGURE 1, whereupon the secondary clamp 12 is pressed downwardly into clamping engagement with the sheets B and base 10. With the secondary clamp 12 thus secured, additional sheets, which may for example be individual checks C, may be fitted over the pegs 38. The sheets B and C may be carbonized so as to transfer an impression thereon from one sheet to the next lower sheet. Thus, the user can tabulate information on the third superimposed sheet C and transfer it to an appropriate horizontal column in the lower sheets B and A.

After this information is tabulated, the uppermost sheet C is easily moved from the pegs 38, and the locking handle 47 moved to released position so as to allow removal of the sheets B, if desired, or indexing of the secondary clamp to another one of the indexed columns, at which point the handle 47 is again moved to the locked position which again clamps the second sheets B to the base 10, at which time the third sheet may be positioned over the pegs 38.

If a new sheet A is desired to be used, the operator simply releases handle 47 and lifts upwardly on handle 43, which allows the main clamp 11 to raise for an easy removal of the sheet A, while at the same time being positioned for insertion of a new sheet A.

In moving the secondary clamping member to another indexed position, the operator may easily cause such movement simply by grasping the handle 47 and sliding the clamping member along rod 26, with or without also grasping the finger piece 27.

Whereas I have shown and described an operative form of the invention, it should be understood that this showing and description thereof should be taken in an illustrative or diagrammatic sense only. There are many modifications in and to the invention which will fall within the scope and spirit thereof and which will be apparent to those skilled in the art. The scope of the invention should be limited only by the scope of the hereinafter appended claims.

I claim:

1. A clamping assembly for bookkeeper's posting work and the like, including a substantially flat base, a main clamp having one side thereof hinged to one side of said base and overlying said base, means biasing said main clamp upwardly away from said base, cams rotatably supported on said base for forcing said main clamp downwardly into clamping engagement with said base, an elongated rod supported on said base and overlying said main clamp, a secondary clamp slidably mounted along said rod and having a clamping portion overlying the inner edge of said main clamp, said secondary clamp being substantially flat and having an upstanding tubular bearing engaging said rod, said secondary clamp having a rotatable locking member at the side thereof opposite to the clamping side thereof, said rotatable locking member having a camming portion engageable with an inclined portion of said main clamping member whereby upon rotation thereof said camming portion engages said main clamping member at points removed from the axis of said rod at varying distances and thereby causes tilting movement of said secondary clamping member, and means biasing said secondary clamping member upwardly away from said base and said main clamping member.

2. The structure of claim 1, characterized by and including an elongated rod for supporting said cams, said secondary clamp being slidably and rotatably supported along said rod.

3. The structure of claim 1, wherein said cams are carried by an elongated rod which is journalled for rotation on said base, and the manually actuated means in the form of a handle fixed to said rod and extended laterally from the axis of said rod.

References Cited in the file of this patent

UNITED STATES PATENTS

2,338,532	Page	Jan. 4, 1944
2,485,513	Straus	Oct. 18, 1949
2,638,360	Straus	May 12, 1953
2,711,911	Zallund	June 28, 1955

FOREIGN PATENTS

555,491	Germany	Aug. 3, 1932