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BOX

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2 Claims. (Cl. 229—44)

The present invention has for its object to provide a box such as disclosed by Patent 1,818,102, dated August 11, 1931, for example, with a novel and improved hinge construction for the lid.

Still another object of the invention is to provide a lid which includes a portion of the preferably tough or strong superficial lamination of the body of the box.

Other objects of the invention are to provide suitable blanks for such boxes.

These being among the objects of the present invention, the same consists of certain novel features of construction to be hereinafter described and then claimed with reference to the accompanying drawing illustrating desirable embodiments of the invention and wherein

Figure 1 is a perspective view of an open cigar box with ends formed from separate pieces;

Fig. 2 is a plan of the same;

Fig. 3 is a section on the line 3—3, Fig. 2;

Fig. 4 is a plan of a blank for forming the main body portion of a box;

Fig. 5 is a section on the line 5—5, Fig. 4;

Fig. 6 is a plan of a blank for association with one side edge of the blank of Fig. 4;

Fig. 7 is an end edge view thereof;

Figs. 8 and 9 are views similar to Figs. 6 and 7 of a blank for association therewith in opposed relation;

Fig. 10 is an enlarged detail of parts shown in Fig. 3 showing the hinge construction for the lid;

Fig. 11 is a detail perspective view of a portion of one corner of the box shown in Figs. 1 and 2.

In the drawing, the cores or principal thicknesses of the paper or other laminated board from which the boxes and blanks are preferably made are for the sake of clearness not shown as laminated, as the laminated feature of the board is fully disclosed in aforesaid patent.

Referring to Figs. 4 and 5 of the drawing, a blank for the main body portion of a box is shown, the same comprising panels 21, 22, 23, and 24. One surface of the blank consists of a lamination 25 which is preferably relatively strong and tough as compared with the thicker portions from which said panels are made, these being preferably of relatively inferior material, but not necessarily so. The finishing or covering lamination 25 is extended to form flexible flaps 26, 27.

In order to enable the bending of the blank around corners or at angles without breaking the material thereof, grooves 28 and 29 which run parallel with each other are cut into the material of the core or thicker material of the blank as compared with the relatively very thin tough outer lamination or covering 25. These grooves 28, 29 are preferably V-shaped in cross-section and may be produced in any desired manner, and preferably the bottoms of the side walls of each of these grooves are slightly separated from each other. Another groove 30 is preferably cut into the thicker material of which the panels are eventually made and this groove extends parallel with grooves 28, 29, but it is preferably rectangular in cross-section, for the purpose to be hereinafter described. All these grooves 28, 29, and 30 extend from side edge to side edge of the blank.

Referring to Figs. 6 and 7 there is shown a blank 31 adapted to provide a separate end wall for a box. It may be composed of the same laminated material of which the blank of Fig. 4 is composed. The blank 31 comprises a foundation board 32 and a face or covering sheet 33 which may be adhesively secured to the foundation board 32. The sheet 33 is of greater area than the foundation board 32 and has its corners cut out. Sheet 33 provides parallel flexible side flaps 34, 35, and at right-angles thereto parallel flexible end flaps 36, 37. The end flaps 36, 37 are slit as shown in Fig. 6 so as to provide flexible tabs 38, 39 at corresponding ends of said flaps.

In Figs. 8 and 9 there is shown a blank 40 which in all particulars is the same as the blank shown in Figs. 6 and 7, but said blank is for use in association with the other blank 31, at opposite end of the ultimate box body.

Referring now to Figs. 1, 2, and 3, a box formed from the described blanks has been made, and to avoid confusion the same reference numerals are used as were used in describing the blanks. It will be seen from said figures that the panels 21, 23 form parallel side walls of the box body and the panel 22 forms the bottom thereof. The superficial tough material which is unbreakable on bending, has been bent along the lines of the grooves 28, 29 so as to form the running longitudinal edges of the box body, while the blanks 31 and 40 have been employed to form the end walls of the box body. In doing so, the inner faces of the foundation boards of the blanks 31, 40 have been adhesively or otherwise permanently secured to the parallel end edges of the walls 21, 22, and 23, forming end walls which are made from entirely separate pieces from the main body blank shown in Fig. 4.

It may not be necessary to gum or glue the thicker portions of the blanks 31, 40 to the edges

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APPARATUS FOR TESTING DEMAND METERS

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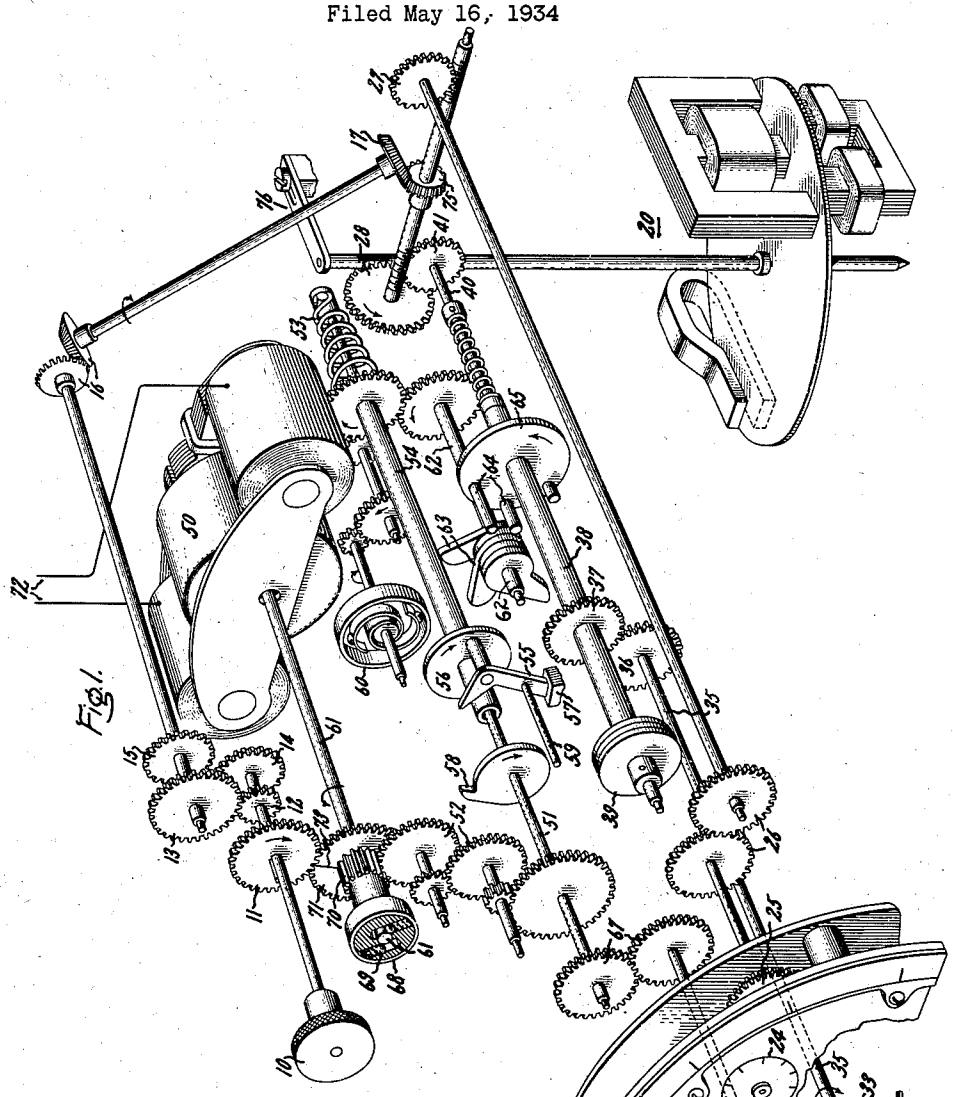


Fig. 1.

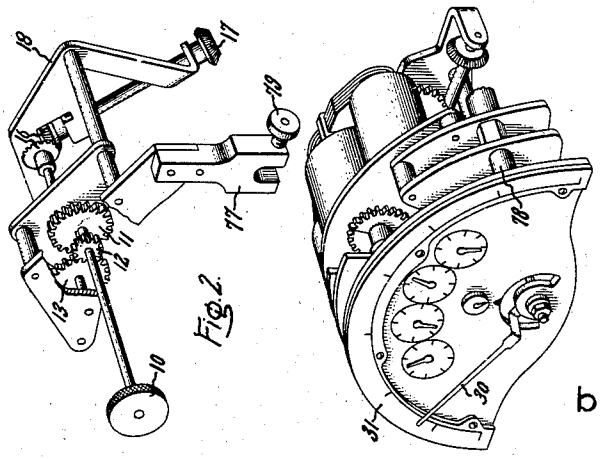


Fig. 2.

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