J. ZEALAND.

COUPON CUTTER.

APPLICATION FILED JULY 3, 1919.

1,365,070. Patented Jan. 11, 1921.

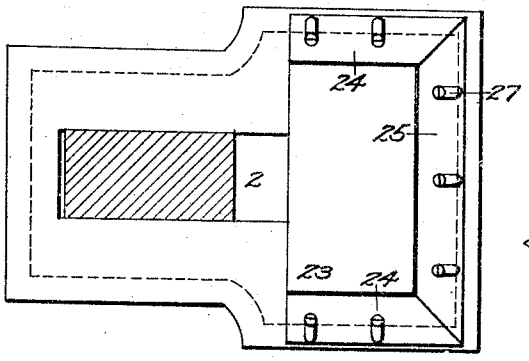


FIGURE 2.

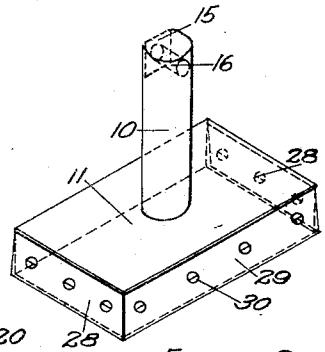


FIGURE 3.

FIGURE 1.

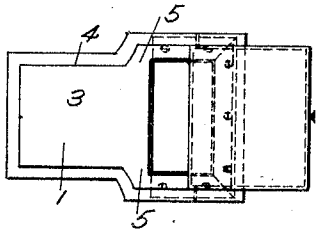


FIGURE 4.

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COUPON-CUTTER.

1,365,070. Specification of Letters Patent. Patented Jan. 11, 1921.

Application filed July 3, 1919. Serial No. 308,485.

To all whom it may concern:

Be it known that I, JONATHAN ZEALAND, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Coupon-Cutters, of which the following is a specification.

This invention relates to improvements in coupon cutters.

With the wide distribution of Government bonds in the last few years, accompanied by the practice of many banks to attend to the detachment of the coupons from, and to the collection of the interest on the bonds for their customers, it has become necessary to cut an exceedingly large number of coupons of exactly the same dimensions at fixed dates from their bond sheets.

It is an object of the present invention to provide a device whereby, through a single operation, a large number of coupons of similar dimensions may be neatly cut and deposited in a receptacle from which they can be removed at desired intervals.

It is furthermore an object of the invention to provide a machine in which the support for the coupon sheets may be suitably adjusted to effect the separation of the coupons uniformly at the narrow interspaces between adjacent coupons so as to prevent cutting or tearing of the remaining portions of the sheet.

With these and other objects in view, the following specification describes the invention in detail with reference to the accompanying drawing, wherein—

Figure 1 is a side elevation of the device;

Fig. 2 is a horizontal section on line 2—2 of Fig. 1, the knife carrier being shown removed;

Fig. 3 is a perspective view of the knife carrier on a larger scale, and

Fig. 4 is a bottom plan view of the device on a small scale.

The main portion of the device consists of a frame, including a base 1 and a yoke 2; the base having a top plate 3 with depending flanges 4, whereby underneath the plate 3 a hollow space is provided. The front portion of the base is slightly enlarged sidewise and also raised, as indicated at 5, and the front flange 4 is cut out to permit the introduction and withdrawal of a drawer 6 sliding in the space confined by the enlarged portion 5 of the base. The sliding movement of the drawer 6 is guided by pins 7, which pass through the flange 4 into slots 8 of the drawer and determine through their impact against the end points of the slot 8 the terminal positions of the drawer. The yoke 2 is preferably made integral with the base 1 and has substantially rectangular cross-section with at portion overhanging the front part of the base 1 similar to the construction known from punch presses, stamp presses, and the like.

The overhanging portion of the yoke has a vertical bore 9 to receive the stem 10 of a knife carrier 11, which carrier is of substantially rectangular cross-section and slightly smaller than the area of the coupons to be cut. The bore 9 communicates at its top with a notch 12 extending lengthwise through the yoke, and the bore 9 furthermore communicates with an extension 13 below the notch 12 adjacent to a vertical socket portion 14 in the yoke.

The stem 10 of the knife carrier has near its upper end a flattened portion 15, from which a bore 16 extends partly through the carrier. This bore serves for the reception of a pin 17, which forms the continuation of a presser finger 18 projecting horizontally from the stem 10 into the extension 13 of the bore 9. A spring 19 is seated in the socket 14 and presses against the under surface of the finger 18. A pin 20, passing transversely through the slot 12, serves for pivotally supporting a cam 21, which is preferably integral with an operating handle 22, and which upon oscillation of the handle depresses the finger 18, thereby also forcing the stem 10 of the knife cutter downwardly. Upon release of the handle 22 it will be turned to the position shown in full lines by the spring 19, and this return of the spring 19 to expanded position also will move the knife carrier upwardly to the position shown in Fig. 1.

The forward portion of the base 1 is slightly raised and provided with a rectangular opening 23 of approximately the size of the coupons which are to be cut. This opening is framed on three sides by adjustable members 24 and 25, which are secured to the top surface of the base 1 by means of fastening screws 26 or the like. The height of these frame members increases slightly from their outer edge toward the inner edge thereof, the inner edge overlying the edge of the opening 23 in the base. An adjust-

ment of the frame members 24 and 25 in direction toward the opening or away from the same may be effected, as the fastening screws 26 securing these frame members to the base, project through slots 27 in the frame members. An exact adjustment of each of these frame members independently of the others is thereby rendered possible, and through the coöperation of these frame members with the knives a neat cut may be made when the knife carrier is lowered.

The sides of the knife carrier 11 support cutting blades 28 and 29, which are secured to the carrier by means of fastening screws 30. The thickness of these blades increases from the top toward the cutting edge thereof, permitting thereby the proper grinding and regrinding of this operative edge.

As the coupon sheets of the bonds present at least one edge on which a cutting operation is not necessary, three of these knives are only shown and an adjustment of three of the frame members for the edges of the opening 23 in the base is only contemplated.

In the operation of the device a series of coupon sheets of bonds are placed on top of the base in such position that the coupons to be separated register approximately with the opening 23. It is advisable to adjust first the frame members 24, 25 to coöperate with the knives 28, 29 and it will be noted that each of the frame members can be adjusted independently of the others. The handle is then depressed to cut the bonds attached to the sheet on three edges, two edges or one edge only and the severed coupons will drop into the receptacle 6. After this operation has been repeated a number of times, the receptacle may be withdrawn and the coupons removed.

I claim:

1. In a device of the character described, the combination of a base having a rectangular opening, frame members adjustably secured on the base adjacent the opening, an upwardly and forwardly extending yoked portion secured to the base having a vertical bore therein in alinement with the opening in the base, a knife carrier reciprocally mounted within the vertical bore of the yoke, a second bore extending into the yoke from the upper surface thereof and arranged in parallel relation with the first mentioned bore, a member reciprocally mounted within the second bore and operatively associated with the knife carrier and means for actuating the reciprocal member.

2. In a device of the character described, the combination of a base frame having a rectangular opening, an upwardly and forwardly extending yoke secured to the base and having a vertical bore therein, a second bore extending into said yoke from the upper surface thereof and in parallel relation with the first mentioned bore, a knife carrier reciprocally mounted within the first mentioned bore, a member reciprocally mounted within the second bore and operatively connected with the knife carrier, an operating handle pivotally mounted on the upper portion of the yoke and adapted to actuate the knife carrier through the reciprocable member when said handle is moved in one direction, and means for returning the knife and the member to normal position when the handle is moved in the opposite direction.

In testimony whereof I affix my signature in the presence of two witnesses.

JONATHAN ZEALAND.

Witnesses:

CHARLES W. MINTZ,

DANIEL A. BRENNAN.