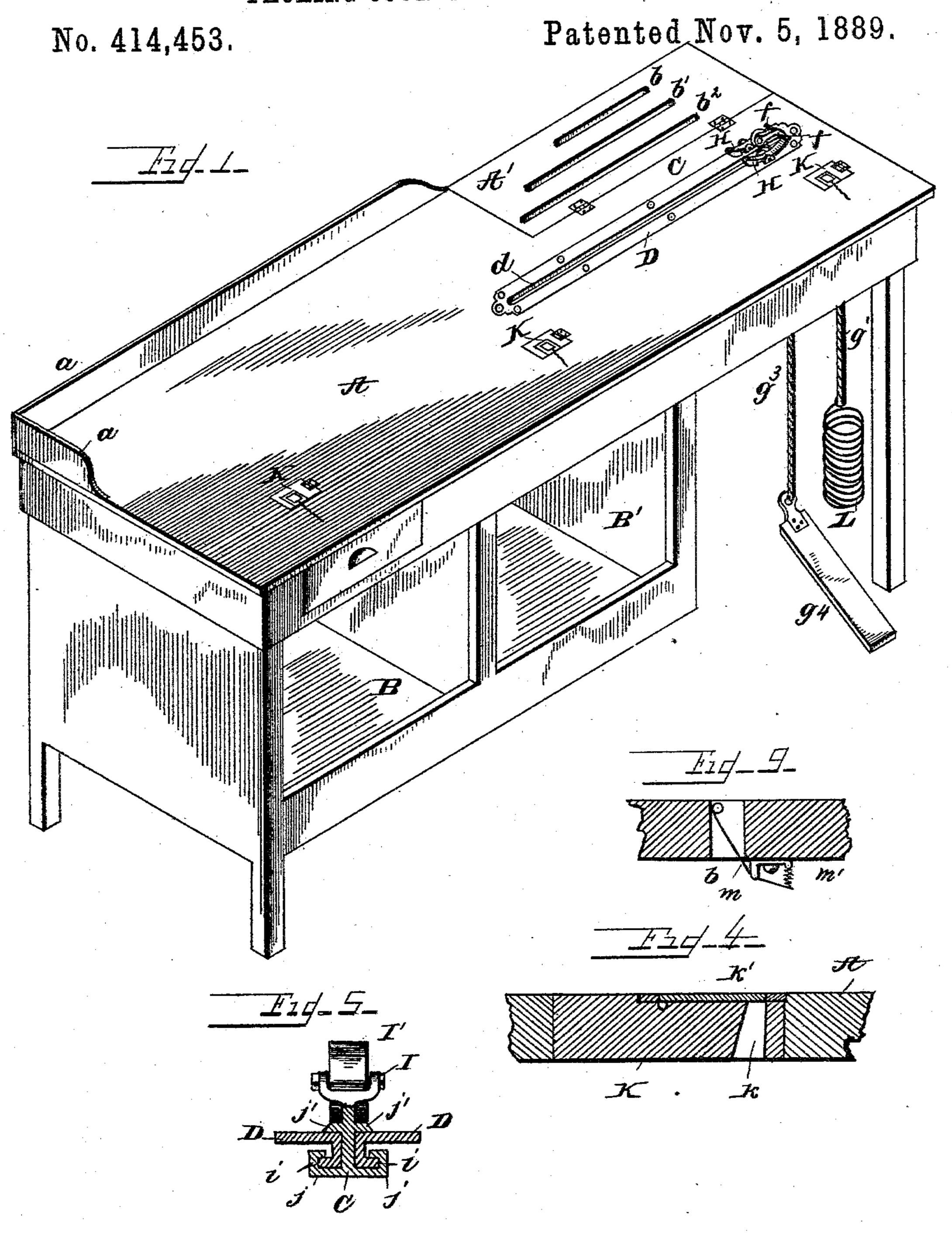
H. T. SIMMONS.

PACKING COUNTER FOR STORES, &c.



Witnesses

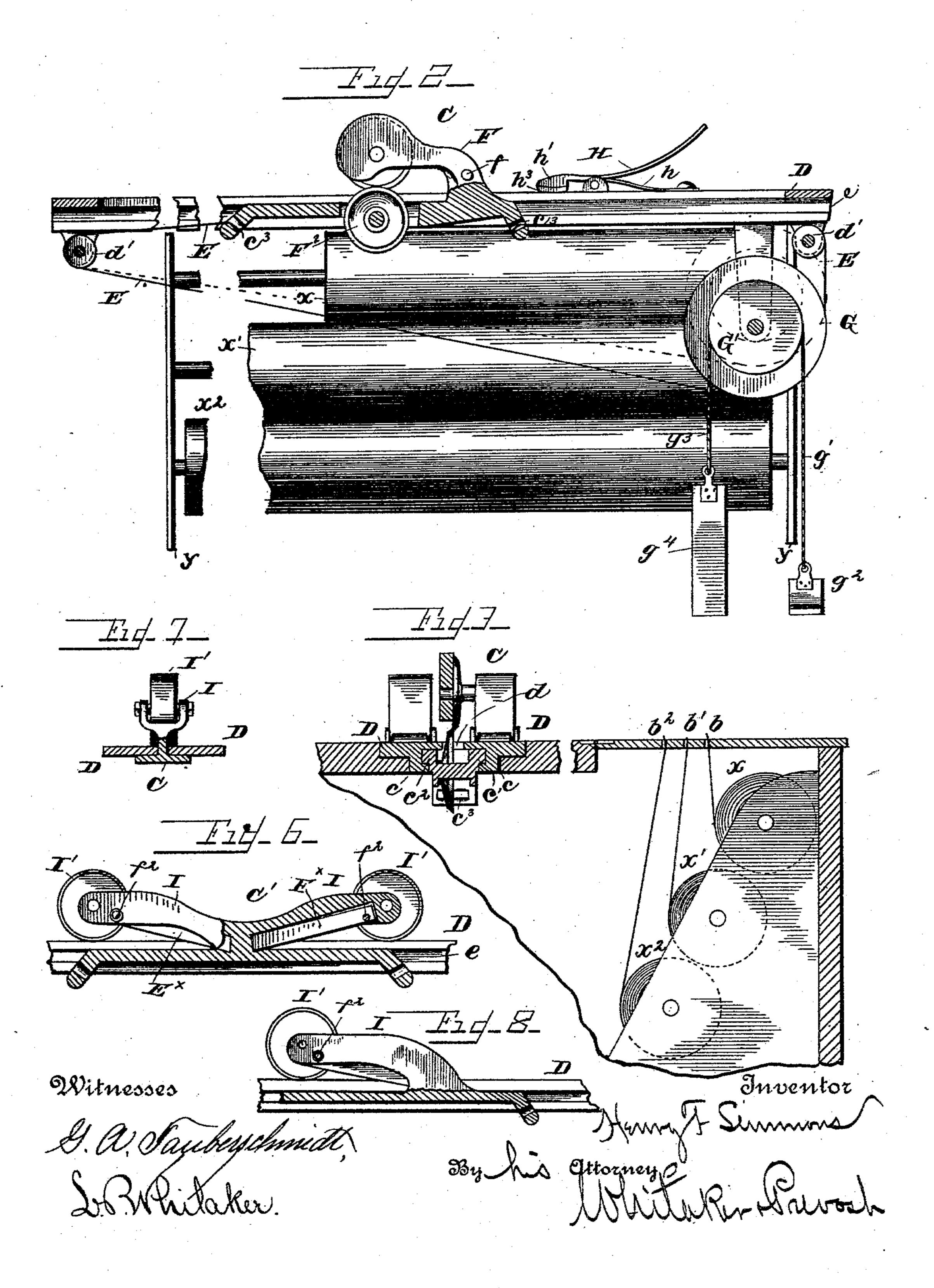
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## H. T. SIMMONS.

PACKING COUNTER FOR STORES, &c.

No. 414,453.

Patented Nov. 5, 1889.



## United States Patent Office.

HENRY T. SIMMONS, OF BLOOMINGTON, INDIANA.

## PACKING-COUNTER FOR STORES, &c.

SPECIFICATION forming part of Letters Patent No. 414,453, dated November 5, 1889.

Application filed March 19, 1889. Serial No. 303,877. (No model.)

To all whom it may concern:

Be it known that I, HENRY T. SIMMONS, a citizen of the United States, residing at Bloomington, in the county of Monroe and State of 5 Indiana, have invented certain new and useful Improvements in Counters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same.

My present invention relates to the class of counters for stores, and more particularly to the branch of that class known as "wrapping or package counters," and to appliances for 15 attachment thereto and for use therewith.

The best forms in which I have contemplated embodying my said invention are illustrated in the accompanying drawings, forming a part of this application, and the inven-20 tion is disclosed in the following specification and claims.

Figure 1 is an isometric perspective view of my preferred form of counter. Fig. 2 is a partial longitudinal section thereof, partly 25 broken away and with parts in section. Fig. 3 is a partial transverse section. Fig. 4 is a section through one of the covers of the cordreceptacles of the counter. Figs. 5, 6, 7, and S are views of modified forms of paper-cutters 30 which may be employed with the counter. Fig. 9 is a part sectional view of the counter, showing the paper retaining and holding device.

In the figures, A is the top of the counter, 35 having an even upper surface to receive and support the articles in the operation of wrapping. This top is supported, as shown, or in · any other preferred way. a is an upwardlyextending ledge or guard, which will be of 40 service in keeping packages already wrapped from rolling off the table; but this may be dispensed with if the counter is placed against a wall. I also provide the counter with two receptacles BB' beneath the top to receive 45 packages or scrap wrapping-paper.

The top of the counter near one end is provided with one or more narrow slots b b' b2, through which may be passed the ends of one or more webs of wrapping-paper mounted in 50 any suitable manner beneath the counter. In this my preferred form these slots are placed in a part A' of the top of the counter hinged

to the main portion, so that it can be raised to facilitate the threading of the paper through the slots and for other purposes. This hinged 55 portion may be fastened down by any preferred means. The paper webs are preferably disposed in rolls, which are mounted, as best shown in Figs. 2 and 3. In these figures rolls  $x x' x^2$  are mounted in bearings y y in 60 an inclined position in respect to each other, so that no matter whether rolls are of the same size or of differing size there will be no contact between the webs in unwinding from the rolls. The slots b b'  $b^2$  may be simply 65 slots in the top of the counter, or may be faced with metal to avoid wear. This metal may be supported by a plate having a slot in it of the desired size let into the top of the table to be flush with its upper surface and 70

secured by nails, screws, or bolts.

Between the paper-slots and the front of the counter is a paper-cutting device, consisting of the reciprocating cutter C, the guideway D, and the means for moving the cutter 75 C when desired. The guideway D is sunk into the counter, so that the upper surface of the same will be flush with the upper surface. of the counter. This guideway extends nearly to the end of the counter, so that the cutter 80 C, when drawn to the end of the guideway near the end of the counter, is beyond or outside of line drawn through the ends of the paper-slots. The guideway D is of the form best shown in Fig. 3, and has a slot d extend- 85 ing longitudinally thereof. The interior walls of this slot below the upper surface of the guide are grooved, as at e e, to receive the carrier of the sliding cutter C, which has side flanges c'  $c^2$  engaging the grooves e e of the 90 guideway. This carrier has also at its ends depending portions provided with slots or openings  $c^3$ . From the carrier an arm F extends upwardly and longitudinally of the carrier, and at a distance from its outer or free end is pro- 95 vided with pins ff. To the outer or free end of this arm is pivoted the revolving cutter-blade F', having a beveled edge, the straight side . overlapping and lying in close contact with the straight side of a corresponding revolving 100 cutter F<sup>2</sup>, pivotally mounted in the base. The outer end of the arm F is widened, so that it extends beyond the cutter-blade F' on all sides, except that on which it engages the

other cutter-blade. This is to protect the blade and prevent the hands of persons at work at the counter from injury by coming in contact with the cutter-blade.

The guideway is provided at each end with a pulley d', preferably grooved in line with slot d and located adjacent to the ends of

said slot.

A cord E is connected to the ends of the 10 carrier and passes over the pulleys  $d^\prime d^\prime$  and around a larger pulley G, mounted in a bracket below the top of the counter. This pulley G is provided with a wheel or pulley G' of less diameter rigidly connected there-15 with. A cord g' is connected to this pulley and is wound one or more times around the pulley G', and is connected with a treadle  $g^2$ , and another cord  $g^3$  is connected to this pulley in a like manner, but extends in a reverse 20 direction and is preferably connected to a treadle  $g^4$ . The relative arrangement of these cords is such that one is wound upon the pulley when the other is unwound, so that one treadle will be raised when the other is de-25 pressed. The relative sizes of the pulleys G and G' are such that a movement of one of the treadles will cause the cutter C to move the entire length of the slot d in one direction, while the movement of the other treadle will 30 cause the cutter to move a like distance in the opposite direction in a well-known way. Instead of the small pulleys and pulleys G G', this last may be slightly raised and the cord E passed around the part G without the in-35 tervention of the small pulley d' at that end of the guideway. In this case the pulley at the other end may be of the size shown, or larger, as desired. Near the outer end of the guideway D are placed two paper-clips H H 40 on each side of the slot d. One of these clips is shown in Fig. 2 in elevation. Each clip consists of an arm or lever of the form shown, and is pivoted in ears upon the guideway. A spring h engages the arm at one side of its 45 pivot and keeps the opposite end h' in contact with the upper surface of the guideway. The under side of the end h' is faced with rubber, as at  $h^3$ , to give it a good hold upon the paper. If preferred, the rubber may be 50 dispensed with and the under face h2 roughened for the same purpose. When the cutter is drawn to the extreme end of the slot, the

55 with the guideway D, as shown in Fig. 1. In Figs. 6 and 8 I have shown a modified form of cutter. In this form of cutter, instead of rotary blades, one or two stationary inclined blades F<sup>×</sup> F<sup>×</sup> are employed. In the 60 form shown in Fig. 6 the base of the cutter is constructed to engage the guideway in the .same manner as in the other construction, and

pins f engage the upwardly-curved ends of

the clips and raise the ends h' out of contact

is provided with two arms I I, extending in -- opposite directions from the center. The 65 blades  $F^{\times}F^{\times}$  enter recesses on the under side of these arms, and are retained by set-screws

knife or blade recess and impinge upon the blade. By means of these screws the blades may be adjusted to a greater or less inclina- 70 tion and bring fresh cutting-edges in contact with the paper. The outer ends of the arms I I are each provided with a roller I' I', having a rubber or other elastic surface bearing lightly upon the upper surface of the guide- 75 way, the slot d being made much narrower than in the form of cutter shown in Figs. 1, 2, and 3, and the rollers I' I' are made wide enough to bear upon both sides of the slot. The relative proportions of the wheels and 80 slot are shown in Figs. 5 and 7.

In Fig. 1, instead of two treadles, I have shown one of the cords attached to a spiral spring secured to some stationary object. In this case the arrangement is such that the 85 tension of the spring upon cord g' tends to keep the cutter in the position shown in Fig. 1. Pressure upon the treadle will cause the cutter to move quickly to the other end of the slot, and on the removal of the pressure upon 90 the treadle the cutter will be returned to its normal position. It is obvious that a weight might be employed instead of a spring. When the spring or weight is employed, I may use a single-bladed cutter, (shown in Fig. 8,) in- 95 stead of those shown in Figs. 1, 2, 3, and 6. This is the same as that shown in Fig. 6, with the exception that it has but a single blade and arm and effects the cutting of the paper only when moving in the direction caused by the 100 pressure on the treadle.

In Figs. 5 and 7 I show different guiding means for the carrier C. In Fig. 5 the guideway D is provided with outwardly-extending flanges i i, and the base of the cutter is pro- 105 vided with flanges j j, recesses to receive and slide upon them. Above the guideway the cutter is provided on each side with a flange j',j', engaging the upper surface of the guideway. In Fig. 7 the construction is simplified 110 and the base of the cutter is made to engage the under side of the guideway, while the rollers I' bear upon the upper surface of the guideway. The chief function of the rollers I' I' is to bear upon and grip the paper, hold-115 ing it from movement before and after the blade of the cutter; but in this latter construction they also serve, in addition, to assist in guiding the carrier, as they keep it in position against the under side of the guide- 120 way.

It will be understood that the blade-cutters may be used with the paper-clips H H, instead of with the rollers, and that the rollers may be used with the revolving cutters in- 125

stead of such clips.

In order to hold the paper from retracting through the slots b b' b2, I may provide each with one or more levers m, pivoted, as shown in Fig. 9, and having the upper end held 130 against the rear wall of the slot by a spring m'. The paper web will pass between this lever and the rear side of the slot. When  $f^2$ , which pass through one of the walls of the | the paper is drawn toward the front of the

table, the lever m will yield and permit the paper to be drawn freely through the slot, and when released the spring will force the lever backward, gripping the same and hold-5 ing it from slipping downward through the slot.

The bracket for supporting the pulleys G and G' may be made in one piece, and I may manufacture the cutter and its operating de-10 vices separate from the other parts of my construction for attachment to counters already in use provided with different paper

holding and supplying devices.

The top of the counter is provided with 15 twine-receptacles, which I prefer to provide with hinged covers K. (Shown in Figs. 1 and 4.) These covers permit the introduction of the ball of twine, and when the covers are closed the twine passes out through the open-20 ing k under the pivoted lid k', as shown in Fig. 1. This lid permits the escape of the twine as it is wanted, but when it is severed from the bundle wrapped, it holds the end of the twine from slipping back into the twine-25 receptacle. The hinges of the covers K and the pivoted portion A' of the top of the counter are so placed that they do not project above the upper surface of the counter and will not engage paper or any bundle or 30 package placed upon the same.

In operating with my improved devices a web of paper of the proper width is drawn out under the clips H H and the bundle or article placed thereon, and the paper folded 35 or wrapped around the bundle or article until the required amount has been drawn through the slot, when the operator by his foot presses the treadle downward, severing the paper. The wrapping is then completed 40 and the package corded and tied by cord from one of the receptacles in the counter. If the spring L is employed, the cutter on being released will be returned to its former position. If two treadles are employed in-45 stead, the cutter will remain until returned by pressure upon the other treadle, which

movement may, if desired, be made to effect another cutting of the paper. The treadle might be replaced by a lever adapted to be

50 moved by the hand of the operator.

What I claim, and desire to secure by Let-

ters Patent, is—

1. A wrapping-counter having a surface for supporting and wrapping articles upon 55 and provided with paper-web supports, a reciprocating paper-cutter, and a movable operating device to be engaged by hand or foot, substantially as described.

2. A wrapping-counter having a surface for 60 supporting articles while being wrapped, having paper-web supports and provided with a guideway, a reciprocating cutter moving in

said guideway, a movable operating device to be engaged by hand or foot, and connections connecting the same with the cutter, sub- 65

stantially as described.

3. A wrapping-counter having a surface for supporting articles while being wrapped, in combination with a guideway, a reciprocating cutter mounted in said guideway, a band or 70 belt for moving said cutter, pulleys for supporting and moving said belt, and a movable operating device to be engaged by hand or foot connected with said pulleys, substantially as described.

4. A wrapping - counter having a top provided with a surface for supporting articles while being wrapped, supports for paper webs beneath said top, a portion of said top being provided with slots for the passage of the pa-80 per webs, said slotted portion having a hingeconnection with the main portion, substan-

tially as described.

5. The combination, with a wrappingcounter having slots for the passage of webs 85 of paper therethrough, of a paper-retaining lever under tension applied within said slots and forcing the paper against the rear wall of the slot, whereby a pull upon the paper to withdraw the same moves the lever to release 90 the paper, substantially as described.

6. The combination, with a counter having a surface for holding articles while being wrapped, of cord-receptacles below the surface of the counter, the said counter being 95 provided with openings for the passage of the cord from said receptacles, and lids for said receptacles and lids for said cord-openings, whereby the backward slipping of the cord is prevented, substantially as described.

7. The combination, with the counter, of a reciprocating paper-cutter and paper-clips adapted to engage the paper on each side of the path of said cutter, substantially as described.

8. The combination, with the counter, of a reciprocating paper-cutter, paper-clips located on each side of said cutter for engaging an edge of the paper, said clips having upwardlycurved portions, and pins on said cutter 110 adapted to engage the upwardly-curved portions of said clips, substantially as described.

9. As an attachment for wrapping-counters, the guideway, the cutter mounted in said guideway, the cord or band for moving the 115 same, the pulley G, and the treadle-operating devices for actuating the pulley G, substantially as described.

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

HENRY T. SIMMONS.

Witnesses:

J. H. WHITAKER, EDWIN S. CLARKSON.