June 13, 1933. R. L. WILLIAMS 1,914,060

SANITARY COVERING FOR LUNCH ROOM COUNTERS AND TABLES

Filed Jan. 24, 1930 2 Sheets-Sheet 1

Fig. 1.

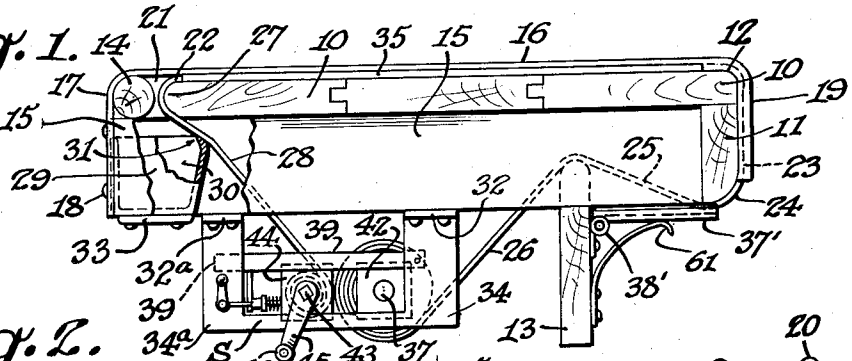


Fig. 2.

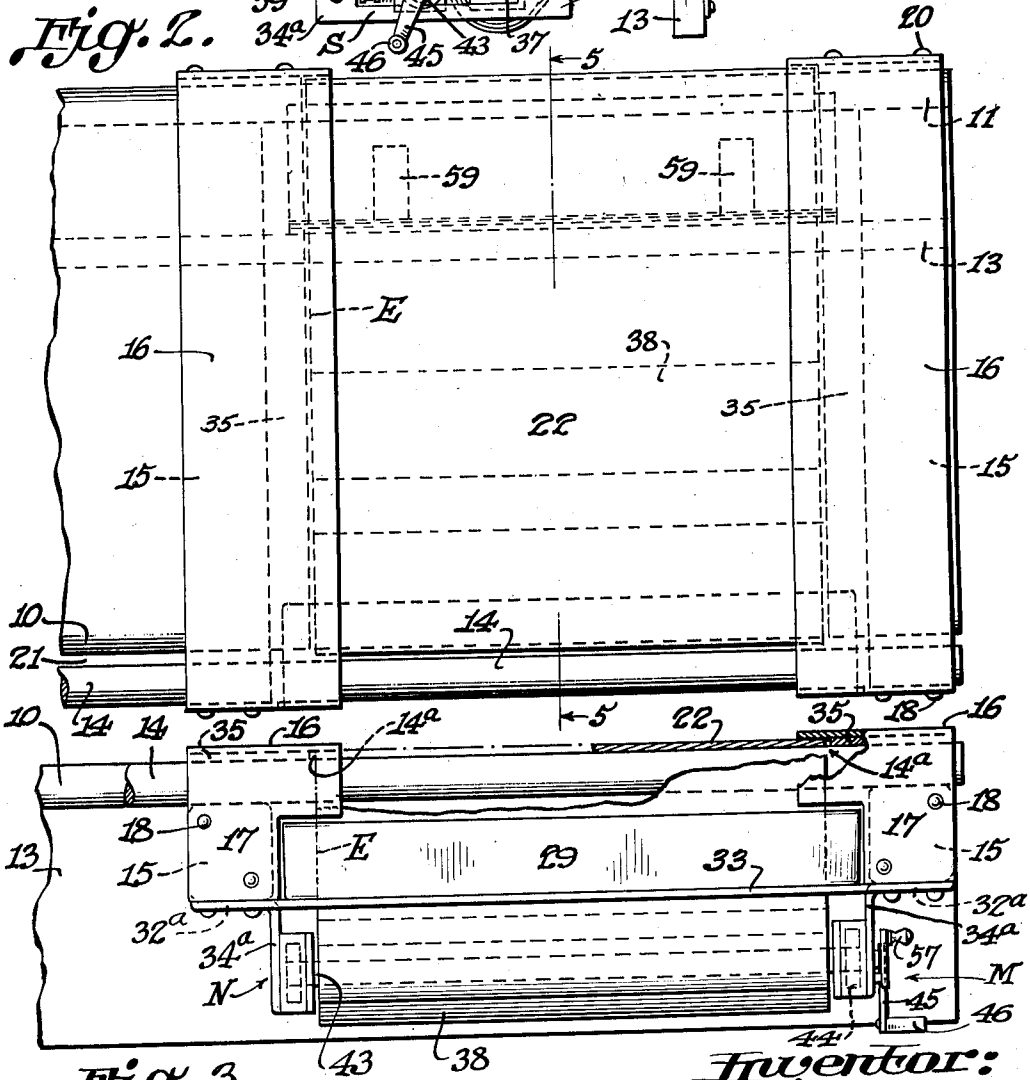


Fig. 3.

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Fig. 4.

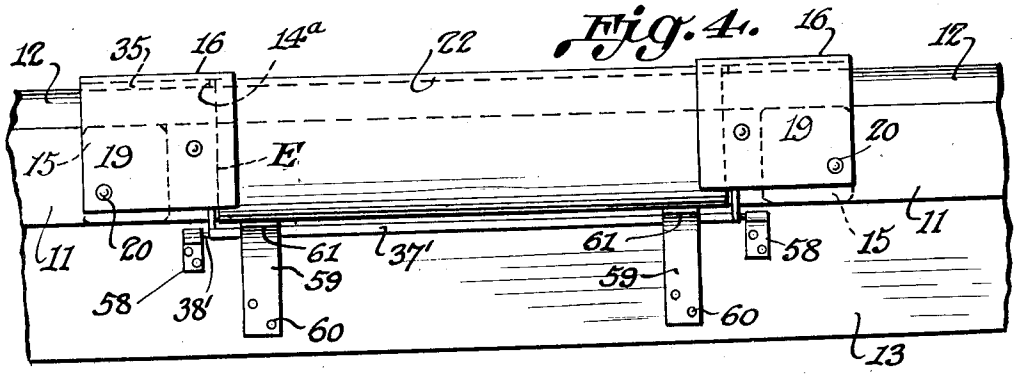


Fig. 5.

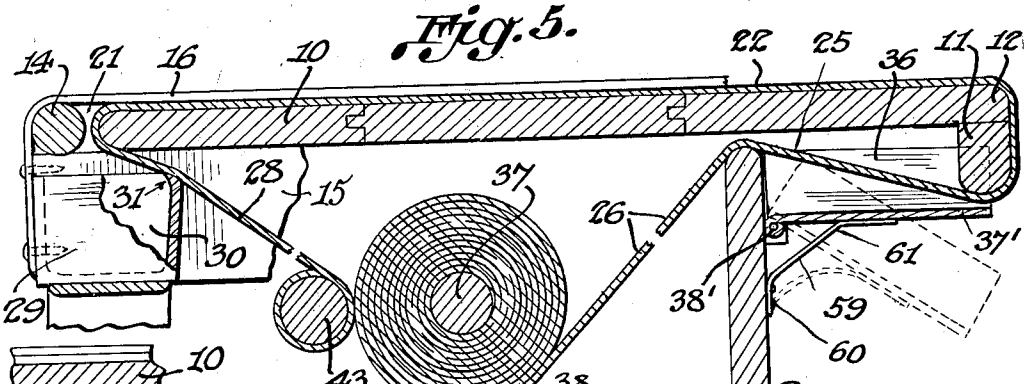


Fig. 6.



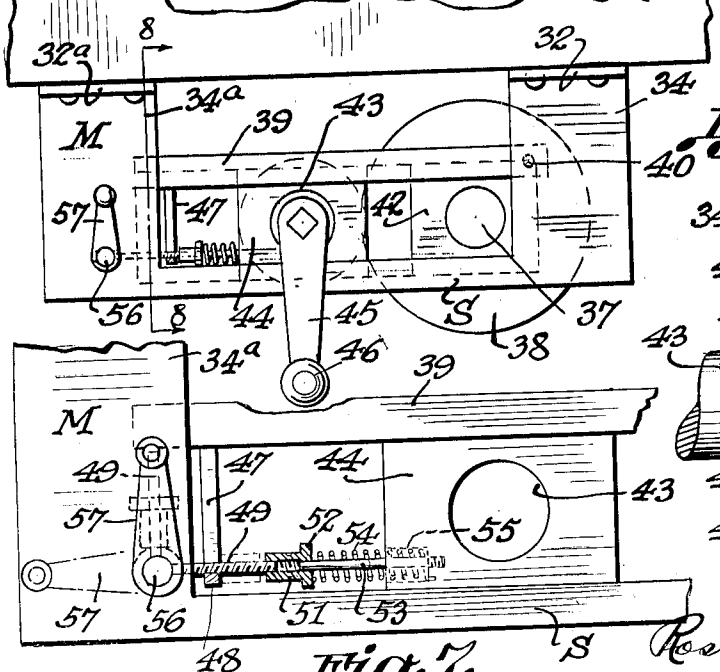


Fig. 7.

Fig. 8.

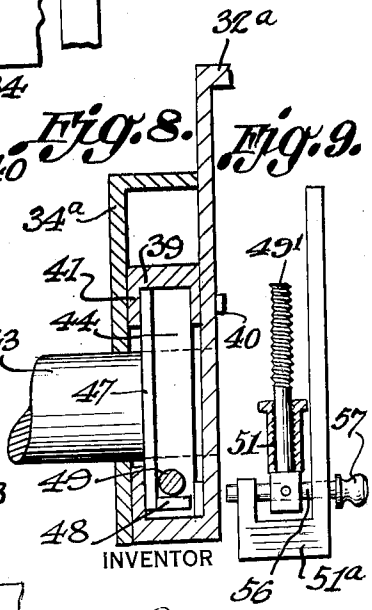


Fig. 9.

INVENTOR

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Patented June 13, 1933 1,914,060

UNITED STATES PATENT OFFICE

ROSS L. WILLIAMS, OF SOUTH GATE, CALIFORNIA

SANITARY COVERING FOR LUNCH-ROOM COUNTERS AND TABLES

Application filed January 24, 1930. Serial No. 423,131.

This invention relates to improvements in sanitary coverings for tables, counters and the like and more particularly to a device for covering the tables or counters of a restaurant and similar place.

One of the objects of this invention is to provide a simple, efficient and inexpensive device designed to movably cover the lunch room counter or table with a preferably paper sheet for the purpose of placing the dishes thereon to replace a table cloth, or the like covering now used, which calls for replacing and subsequent laundering.

Another object of this invention is to provide a mechanical device having provision for placing in overlying position upon the counter or table a paper strip extending transversely of the counter or table for the purpose of having the plates, dishes placed thereon so drippings, crumbs and other particles falling thereupon may cling upon the covering and be removed when the paper covering is replaced.

A further object thereof is to provide a machine having a paper strip magazine or the like from which a strip of paper may be manually fed as occasion warrants to overlie the lunch counter directly opposite to where a customer sits so as to extend across the counter in front of the customer so all dishes may be spread upon this strip of paper as upon a covering.

Another object is to provide a roll of paper any portion of which is designed to be manually and progressively fed so as to overlie the counter top, and as soon as a customer has left his seat opposite to the counter a fresh strip of paper may be instantly fed over the counter for the purpose of covering the counter for the next customer, so that in this manner the remains of the meal which may cling upon the paper strip can be quickly and conveniently removed, and a fresh sanitary sheet be at all times displayed upon the counter, one for each customer.

And another object of this invention is to provide simple practical means for renewing a supply of paper roll under the counter when the first roll has been used up, so that the device may be continuously in operation.

Another object of this invention is to provide means whereby as any portion of the strip of paper overlying the counter or table is being fed away from the top of the counter to give way to a fresh portion, any clingings upon the paper will be automatically removed and deposited in a suitable receptacle made to receive the same.

A further object thereof is to provide means for preventing the accidental severing of the paper strip as it moves at the front part of the counter in the vicinity of the knees of the customer occupying a seat thereadjacent to the end that a guard is provided to protect such portions of the paper strip as would be otherwise exposed and possibly disconnected.

Another purpose of the invention is to provide an installation or attachment for existing lunch room counters and the like whereby a roll of paper underneath the counter may be operatively unwound manually so that a strip of paper will extend over one edge of the counter and extend movably transversely of the counter to a take-up roll upon which it is wound. For this purpose, one installation will include a pair of spaced apart transversely extending guide plates secured upon the counter and accommodating as guides the opposing edges of the paper strip movably to prevent lateral displacement or shifting of the sanitary paper strip over the counter.

With the above and other objects in view my invention consists in the combination, arrangement and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings, wherein similar refer-

ence characters designate similar parts throughout the respective views,

Figure 1 is a side elevation of my invention applied in position upon the top of the counter with parts located therebeneath.

Figure 2 is a top plan view of a single installation of my invention,

Figure 3 is a rear end elevation of my invention,

Figure 4 is a front end elevation thereof,

Figure 5 is a fragmental sectional view taken substantially on the line 5—5 of Fig. 2,

Figure 6 is a fragmental side view of the bearings on one side of the invention for the winding up and take up rolls of the paper sanitary web,

Figure 7 is a fragmental detail view of means for simultaneously locking the top of a bearing and applying tension against an axle box therein,

Figure 8 is a sectional view, taken on the line 8—8 of Fig. 6, of a unit designed to receive the bearings for the paper roll, and

Figure 9 is an end elevation of a part of the bearing showing the locking means for the bearing top.

In the drawings, which are merely illustrative of my invention, a counter of a lunch room or the like is designated 10 and is of any approved construction, the opposing end edges thereof being preferably rounded as at 12. Extending in front of the counter is the usual longitudinal ledge 11 extending vertically downwardly from the counter, and spaced in back of this ledge with its top spaced below the counter is the usual foot board 13. The framework of the counter will preferably include a longitudinally extending rod 14 spaced in alinement at the rear edge of the counter and secured fixedly and rigidly upon a sill or sills 15 attached from the under side or surface of the counter to the ledge 11 as shown in Figure 1.

Each installation of my invention is designed to provide a single unit of sanitary covering for one customer seated opposite to the counter. To this end I provide a pair of flat plates 16 which I space apart on the counter so that they extend transversely of the counter, overlying bars 35 also extending transversely of the counter but terminating short of the opposite ends of the plates and having confronting edges spaced in back of the confronting edges of the plates or guides 16 so that transverse grooves or tracks 14*a* are provided for the opposing edges E of a paper web or strip 22 designed to be made of a width equal to the distance apart between these confronting edges of plates 35.

The guide plates 16 have their opposing ends or terminals, designated respectively 17 and 19, bent back so as to overlie the ends of the under plates 35 by which they are spaced away slightly from the opposing edges of the counter proper 10. The terminals 19 are secured by the fasteners 20 upon the ledge 11 and terminals 17 are bent around and downwardly from the rods 14 and then secured by fasteners 18 to the sills 15 or equivalent parts. The space between the rod 14 and the adjacent rear edge of the counter is designated 21 (Fig. 2).

The paper strip 22 overlies the counter across its width, and one portion then extends in underlapping relation with the terminal 19 of the plates 16, and has a portion 23 which curves around and under the lower edge of the ledge 11 as at 24 and thence the portion 25 of the paper strip extends upwardly and bridges the space between ledge 11 and footboard 13 and rubs against the top of the footboard and then has a portion 26 extending downwardly and designed to be unwound from a roll of paper mounted upon the mandrel 37. The free end of the web, after passing around and downwardly of the rear edge of the counter at 27 is wound up or attached to a take-up roll or mandrel 43 which carries a crank 45 for operating the same.

Means are provided for collecting the deposit of particles whether crumbs, clingings, or other particles upon the web portion that overlies the counter at any one time. For this purpose there is provided a receptacle 29 extending longitudinally along the rear of the counter but therebelow and operatively supported between the sills 15—15 by a shelf 33 or any desirable part of the counter framework. The interior of this receptacle is designated 30 and the open upper end of the receptacle contacts a portion 28 of the web, which portion attaches to the take-up roll 43. It will be seen that the forward corner of this receptacle is made rotund and the web portion 28 as shown in Figure 5 will bear frictionally thereagainst, the rotund portion also providing a scraper 31 which when it rubs frictionally against the paper as the paper moves will dislodge and remove everything effaceable from the paper web which particles removed by the scraper will fall into the receptacle from where they can be readily removed.

Means are provided for applying desirable tension against both the feeding roll and take-up roll. Any desirable means may be provided for this purpose, such as a spring pressing against the axle boxes holding the mandrels 43 and 37 of the take-up and the feeding roll. I disclose an effective means for simultaneously applying tension and for removably closing the bearings for the axle boxes. Reference being made to Figures 6, 7, 8 and 9 it will be seen that a pair of depending box-shaped frames M and N are provided to support the pair of bearings, each frame having two spaced horizontal flanges 32, 32*a* secured to the sill 15 or any adjacent part of the framework of the counter. Each frame

also includes box-shaped hangers 34, 34*a* depending from the flanges 32, 32*a*, respectively. There is a floor 51*a* connected so as to bridge the lower ends of the hangers 34, 34*a* of each frame M and N so as to provide a guide S, the ends of each hanger being closed. Axle boxes 42 and 44 are adjustably or slidably seated in each guide. An inverted U shaped lever 39 is pivoted at one end at 40 to the hanger 34 of each frame and is designed to close down upon so as to straddle the upper sides of the axle-box 42 or 44 to confine the axle-boxes in the mentioned guides. The ends of the mandrel 37 are journaled revolvably in a pair of oppositely arranged axle boxes 42, while the mandrel 43 has its ends journaled in a pair of axle boxes 44 mounted in the two frames M and N. It will be seen that there is a depending arm 47 carried by the lever 39 which has an angular lug 48 formed at its bottom. There is a shaft 56 journaled in one end of the box-shaped hanger M and operated by a crank 57. The shaft 56 carries a locking shaft 49 which can swing from a vertical normal inoperative position shown in Figure 9, to an active horizontal position shown in Figure 7. The free end of this shaft is screw threaded as at 49′ and has a sleeve 51 threaded thereon, which sleeve has a head 52. There is a rod 53 having one end rigidly secured in a bore 55 in an end of the axle box 44, with a spring 54 coiled around the rod. The spring 54 has one end fixedly secured in the bore and projects out of the bore where it engages around the rod 53. Normally this spring when expanded is longer than it is shown to be in Figure 7, as then the sleeve 51 has been screwed back on the shaft or rod 49 as far back as possible. The rod 49 is of such a length that when in upright position, and the lever cover 39 is horizontally closed, the rod 49 may clear this lever effectively when moving to horizontal position. The rod 49 is stopped in downward movement horizontally when it overlies the lug 48 of the arm 47 of lever 39 as shown in Figures 6 and 7, as then it locks the lever against accidental displacement. In this lug-overlying position the rod 49 will aline accurately with the fixed rod 53 which has the spring 54 coiled thereabout. When the sleeve 50 is screwed so as to move to the outermost end of the threaded portion thereof, the free end of the sleeve will ride telescopically upon the rod 53, but first the head 52 of the sleeve will compress the coiled spring 54 which act tensions the axle box 44, so the roll of paper wound on the take-up mandrel in this axle box is pressed compensatingly against the bigger roll of paper wound upon the mandrel 37 of the other axle box 42. This means of tensioning, simultaneously holds the axle boxes their proper distance apart and prevents them being displaced from their bearings.

I also intend to protect the paper web from being accidentally severed when the knees or other portions of the customers legs may be placed below the counter and in proximity of the foot board 13. The bridging portion 25 of the paper web would ordinarily be subject to this hazard and to prevent this I provide any suitable means in the form of a guard that will bridge the space under this web portion 25 and come directly into contact with the customer's knees thus preventing undue pressure being applied against this web portion by which it might be torn off from the roll thus creating slack in the overlying paper portion on the counter.

The means may consist of the channel-shaped member having the bottom portion 37′ having the side walls 36, which side walls are pivotally mounted upon the elongated pintle 38′ having its ends movably received in desirable supports 58. This guard, having a bottom portion and side walls, encloses the web 25 completely but is rendered yieldable so it may move downwardly by any desirable means, against the tension of a sear or leaf spring 59 secured at 60 and having its free end or terminal 61 bearing under the guard to keep it normally closed. This guard may be held down to allow the operator thread a portion of the web 25 over the footboard and around the ledge and up around the counter.

The space on the counter between the guide plates 16 is reserved for one diner, and the paper strip 22 between these plates represents the table cloth so that dishes and plates will be set there upon before the diner. The crumbs, bits of food and other particles sticking or clinging to this paper strip will disappear the moment the operator takes hold of the handle 46 of the crank 45 and turns the take-up roll which winds paper onto mandrel 43 and off from the feed roll 38. As the strip moves off the counter, another and fresh portion is moved in overlying engagement with the counter and the counter is thus quickly cleared for another diner. Since the paper roll, when ultimately trained upon the take-up roll, will be removed and discarded, no laundering of linens is necessary. I do not confine myself to the exact details of construction but cover all variations falling within the purview of the appended claims.

What I desire to claim and secure by Letters Patent is:—

1. A device of the kind described consisting of a paper roll, a counter thereover over which a portion of said paper passes movably, a take-up roll, for said paper, means for holding the paper on said take-up roll in frictional engagement with the paper roll to tension the unwinding of the paper roll, means for unwinding the paper roll as said take-up roll is rotated, and means for arch-

ing the paper at a point between the paper roll and the counter.

2. As a new article of manufacture a sanitary covering for counters and the like which consists of a frame below the counter, a mandrel rotatedly mounted in said frame, a take-up mandrel rotatedly and movably mounted in said frame adjacent to said first mandrel, a roll of paper wound upon the first mandrel and having a stretch thereof movably overlying the counter and having its free end secured to and windable upon the second mandrel as the first mandrel unwinds, a crank on the second mandrel, and means holding the second mandrel with its winding of paper in tensional contact with the first paper roll.

3. In combination with a counter or the like, a supply of paper strip having its intermediate portion overlying the counter transversely, a pair of plates surmounting the marginal edges of said overlying paper strip portion and being secured rigidly to the counter, means whereby said plates provide tracks for guiding the marginal edges of said paper portion, and manually operated mechanism for shifting the mentioned portion of paper strip to feed a fresh portion over the counter in said tracks.

4. In combination with a counter a pair of plates spaced apart longitudinally thereof and extending transversely of the counter, a pair of guide members overlying the said plates transversely and having their inner marginal edges projecting in advance of and over the plates to provide opposing tracks under the marginal edges of the guide members, and a paper strip of a width to have their opposing edges slidably engage the adjacent edges of the plates and to be surmounted by the mentioned marginal edges of the guide members, said paper strip being trained movably upon the counter to serve as a sanitary covering therefor.

5. In a device as described the combination of a counter, a ledge depending therefrom at one side, a foot-board extending vertically in back of the ledge with its upper end rounded and spaced below the counter, the opposing side edges of the counter also being rounded, a rod extending longitudinally in spaced relation to and in line with the rear edge of the counter, a continuous paper web trained transversely upon the counter and passing around and downwardly of the ledge, and over the rounded top of the foot-board, and around the opposite end edge of the counter in the space between the rod and the counter, means engageable with the free ends of the paper web under the counter for displacing the paper over the counter to feed a fresh portion of the web thereover, and track-making plates extending transversely of the counter and having terminals bent around the rod and secured thereto, said plates overlying and guiding the opposing marginal edges of the portion of paper web overlying the counter.

6. In a device as described, in combination a counter having opposing rounded longitudinal edges, a depending ledge attached to the front edge of the counter, a foot-board spaced in back of the ledge with its top spaced below the counter, a paper web having a stretch thereof overlying the counter, and passing over, around, and downwardly from the rounded edges of the counter, the said web engaging the under edge of the ledge and bridging the space between the ledge and the foot-board top over which it passes, means engaging one end of the web to wind it up to feed the web across the counter, and a roll of said paper web held in engagement with said last-named means so as to unwind as said means functions.

7. In a device as described the combination of a counter, a ledge depending from one longitudinal edge thereof, a foot-board spaced in back of the ledge with its top below the counter, a paper web movably mounted over the counter and passing downwardly around and in contact with the ledge and bridging the space between ledge and foot-board, and guard means yieldably carried by said foot-board and protecting the bridging portion of the paper web between ledge and foot-board against tactual displacement.

8. In a device as described, in combination a counter, an under frame carried thereby, a pair of bearings secured in depending relation from the underframe in spaced apart relation, a pair of axle boxes removably positioned in slidable relation in each bearing, a mandrel rotatedly mounted in each axle box, a roll of paper wound upon one mandrel and having a stretch thereof passing around, over, and upon the counter transversely thereof, and projecting downwardly from an opposite counter edge relatively to its first point of passing around the counter, being secured to the second mandrel, and a crank on the second mandrel designed to rotate the mandrel, wind up the web, and unwind the paper roll, to feed the web across the counter.

9. In a device as described in combination a counter, a paper strip fed in taut overlying relation upon the counter and having one portion passing around an edge of the counter downwardly thereof, an open top receptacle extending adjacent to the mentioned edge and having an inner wall situated beneath said counter and spaced from said edge, the exterior top edge of said inner wall having a rounded lip for bowing and scraping the paper strip engaging the same, so when the paper strip rubs against the lip clingings are scraped off and deposited into the interior of the receptacle.

10. In combination with a counter, a shiftable paper covering thereupon, means for

feeding said paper over the counter, a take-up mandrel to which one end of the paper is secured for winding up purposes, a pair of aligned sub-frames upon the counter, bearings spaced at opposite points on the said sub-frames, said sub-frames each consisting of a rectangular member with removable top, axle boxes in said rectangular member in which corresponding ends of the mandrels are journaled, and means whereby simultaneously the removable top is held closed and the axle boxes are held in tensioned relation with each other.

In witness whereof he has hereunder set his hand this 10th day of January, 1930.

ROSS L. WILLIAMS.