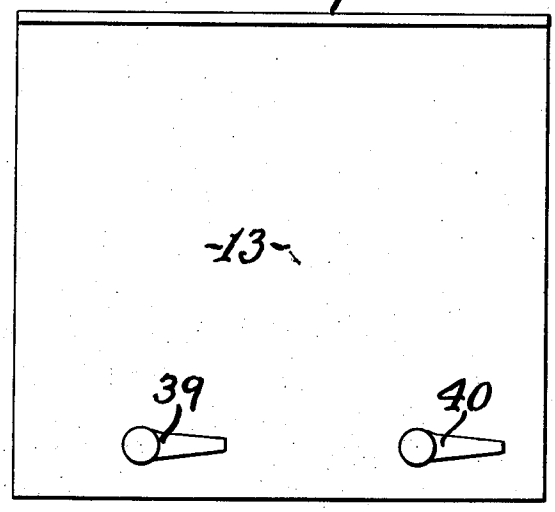
April 19, 1949. S. H. ARCHER 2,467,799

SANITARY HOLDER AND DISPENSER FOR TONGUE BLADES

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FIG. 1



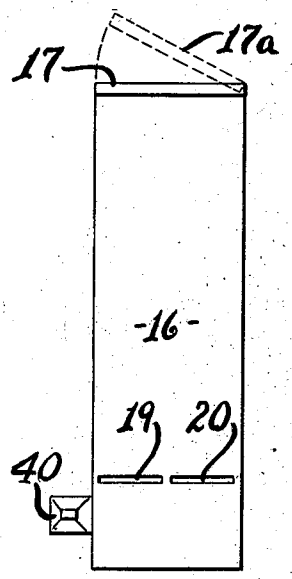


FIG. 2

FIG. 3

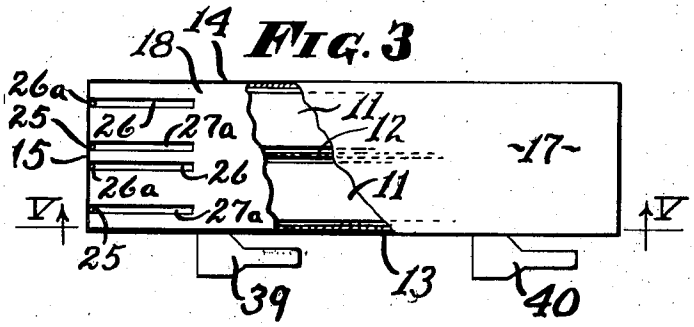
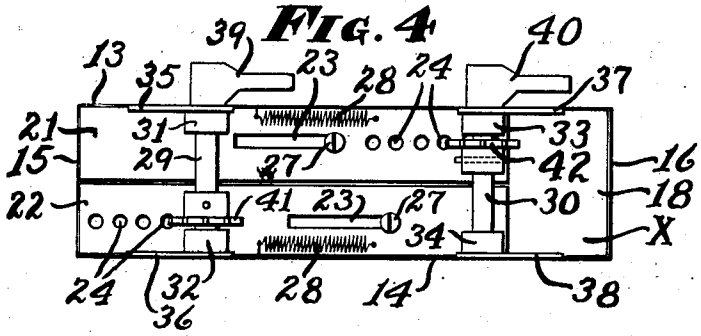


FIG. 4



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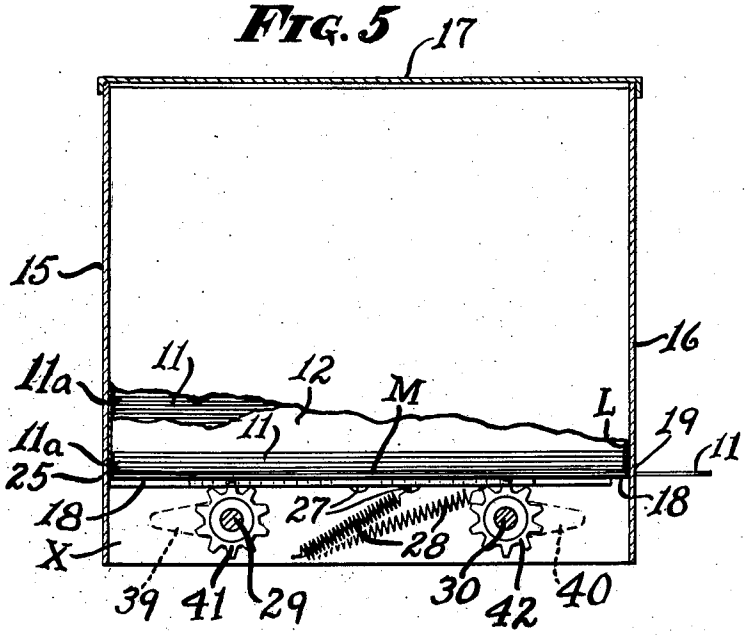
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SANITARY HOLDER AND DISPENSER FOR TONGUE BLADES

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FIG. 5



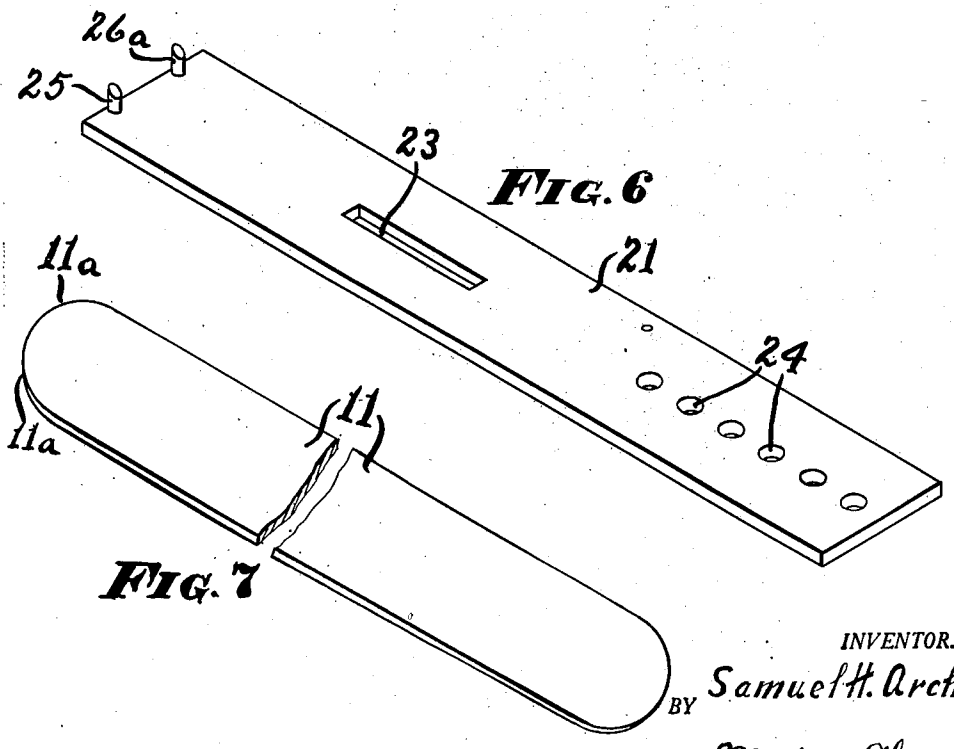


FIG. 6

FIG. 7

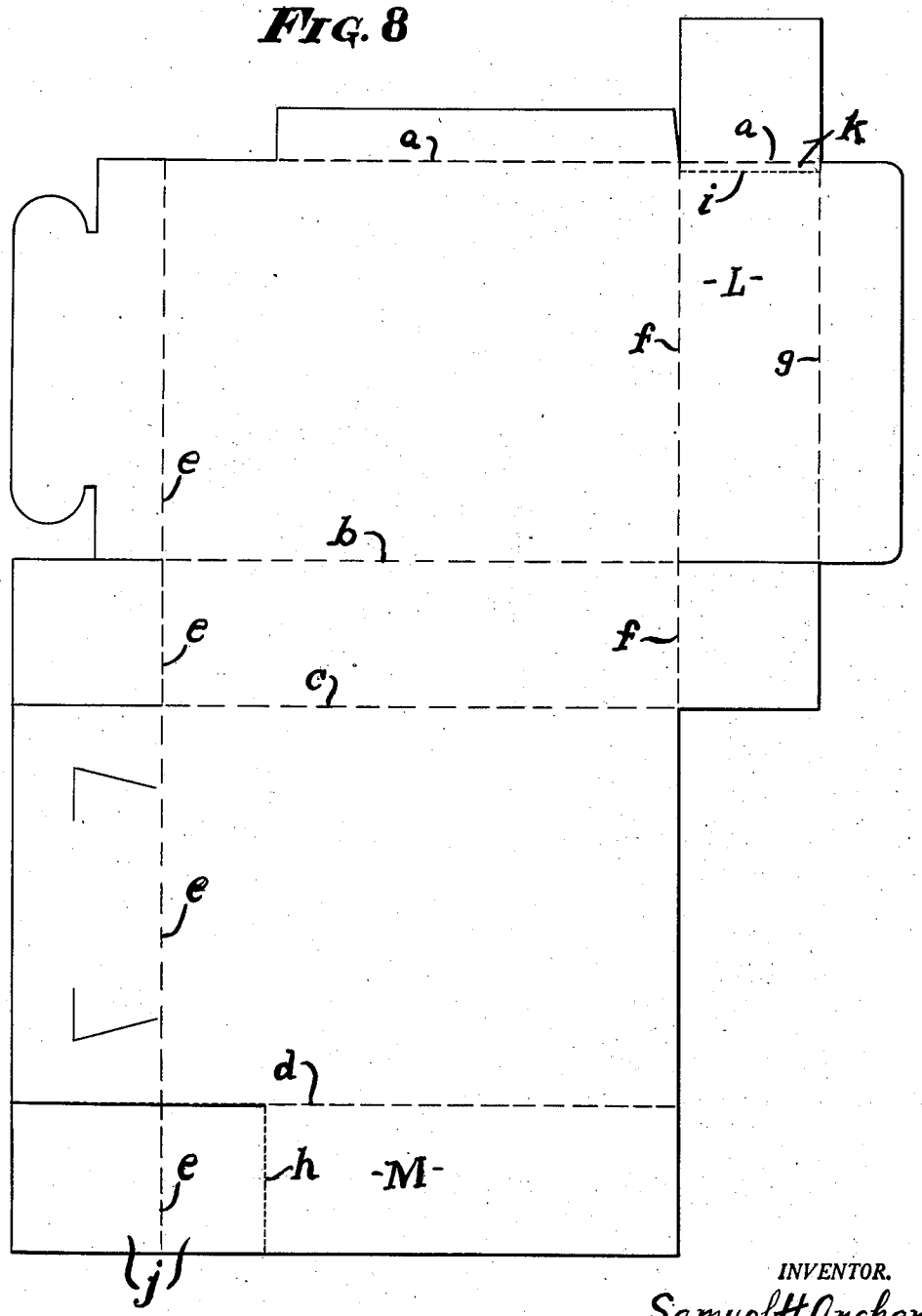
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SANITARY HOLDER AND DISPENSER FOR TONGUE BLADES

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FIG. 8



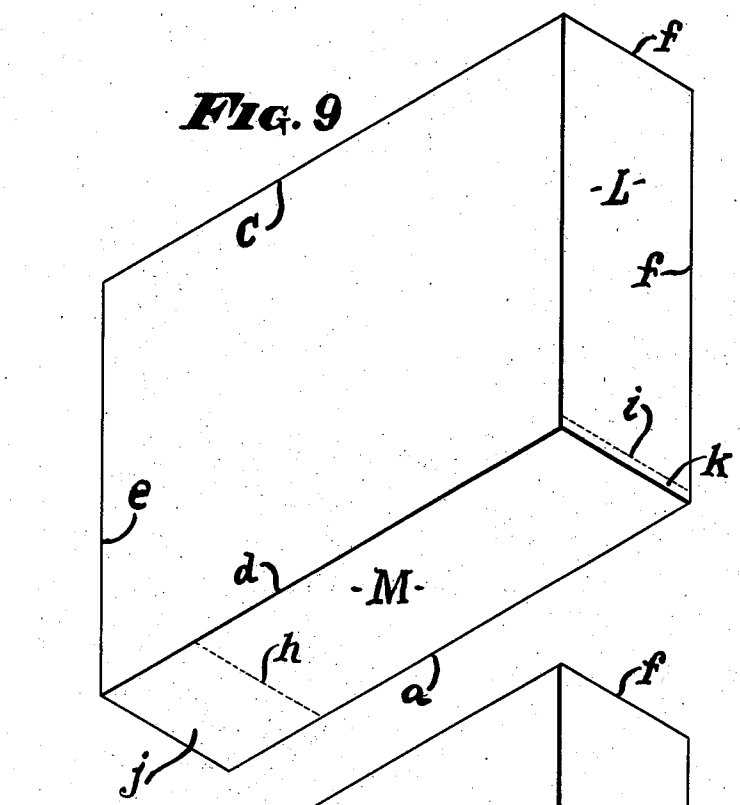
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SANITARY HOLDER AND DISPENSER FOR TONGUE BLADES

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FIG. 9



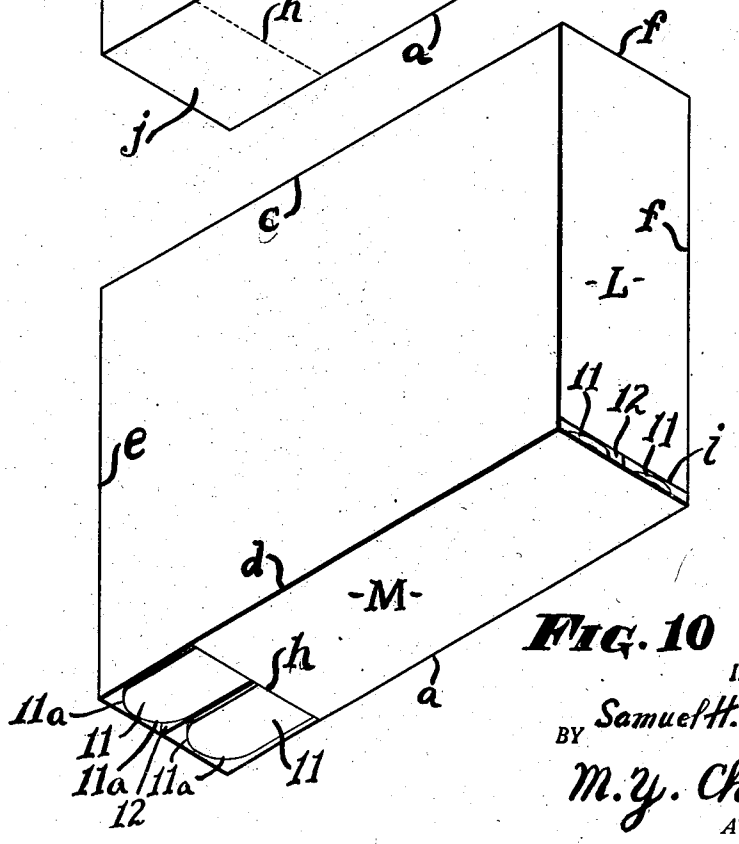


FIG. 10

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SANITARY HOLDER AND DISPENSER FOR TONGUE BLADES

Samuel H. Archer, Wichita, Kans.

Application April 28, 1945, Serial No. 590,812

1 Claim. (Cl. 312—67)

1

My invention relates to an improvement in sanitary holders and dispensers for tongue blades. The object of my invention is to provide a sanitary and sterilized package of tongue blades and to provide a holder for the package that includes a dispensing mechanism for the tongue blades.

A further object is to provide a package holder and dispenser as above mentioned that is simple, easy to produce and inexpensive to make and sell.

A still further object is to provide the device above mentioned that is durable and substantial and one that is fool proof and one that will be long lived.

These and other objects will be more fully described as this description progresses.

Now referring to the accompanying drawings:

Fig. 1 is a front elevational view of the device.

Fig. 2 is an end view of the device shown in Fig. 1.

Fig. 3 is a top plan view of the device shown in Fig. 1, parts being broken away for convenience of illustration.

Fig. 4 is a bottom plan view of the device shown in Fig. 1.

Fig. 5 is a detail front view of the device, parts being broken away and shown in section for convenience of illustration.

Fig. 6 is an enlarged detail perspective view of one of the tongue blade dispenser feeder plates.

Fig. 7 is an enlarged detail perspective view of one of the tongue blades such as is dispensed by the device.

Fig. 8 is a detail pattern of the element that may be folded to form the sanitary packing box for the tongue blades.

Fig. 9 is a detail perspective view of the tongue blade packing box before it is prepared for use in the dispenser container box.

Fig. 10 is a detail perspective view of the tongue blade packing box after it has been prepared for insertion in the tongue blade dispenser box.

Similar numerals of reference designate the same parts throughout the several figures of the drawings.

In the drawings is shown a sanitary tongue blade packing box that is preferably made of cardboard cut in the form of the pattern shown in full lines in Fig. 8 and then folded along the dotted lines *a*, *b*, *c*, *d*, *e*, *f* and *g* to form a packing box such as shown in Figures 9 and 10 in which the tongue blades **11** are packed in piles, the piles being separated by a cardboard partition or separator **12**. The cardboard is perforated along the lines *h* and *i* for tear off purposes of the flaps *j* and *k*, as will later be explained.

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The dispenser box comprises a box like element having side walls **13** and **14**, end walls **15** and **16**, a flanged cover element **17** that is hingedly attached to the back wall **14** of the dispenser box so that the cover **17** may be rocked upwardly as indicated by the dotted position **17***a* to open the top of the dispenser box so that the tongue blade packing box may be inserted therein. The dispenser box is provided with a bottom **18** that is well above the bottom edges of the side and end walls **13**, **14**, **15** and **16** to form a housing compartment *x* for the dispensing mechanism.

The end wall **16** of the dispenser box is provided with a pair of horizontally positioned slots **19** and **20** that are located immediately adjacent and above the upper surface of the dispenser bottom or floor **18**.

Positioned against the under side of the dispenser floor element **18** is a pair of dispenser slide plates **21** and **22**, each of which has a longitudinally positioned slot **23** in the central portion thereof. Each slide plate is provided with a series of equally spaced apart holes **24** for receiving pinion wheel teeth as will later be explained. One end of each slide plate **21** and **22** is provided with a pair of upwardly directed pin-like elements **25** and **26***a*.

The floor **18** of the dispenser box is provided with slots **26** and **27***a* through which the pins **25** and **26***a* project, the object of which will later be made obvious. The upper ends of the dispenser pins **25** and **26***a* are bevelled or cut at an angle to facilitate the action of the pins in dispensing the tongue blades as will later be explained.

The slide plates **21** and **22** are positioned side by side and are slidably held against the bottom side of the dispenser box floor **18** by means of screws **27** that pass through the slots **23** and are threaded into the floor element **18** of the dispenser box.

Each dispenser slide plate **21** and **22** is provided with a small spiral spring **28**, one end of which is attached to the adjacent side wall of the dispenser box and the other end being attached to its respective dispenser slide plate **21** or **22**, the spring **28** functioning to pull its respective slide plate **21** or **22** toward the end wall **15** so that the end of the slide plates **21** and **22** will normally rest against the end wall **15**.

A pair of shafts **29** and **30** are journalled in bearings **31** and **32**, and **33** and **34** that are rigidly carried on downwardly turned lip elements **35** and **36**, and **37** and **28** that are a part of the bottom element **18**. Rigidly mounted on the front end of the shafts **29** and **30**, adjacent the

outside of the front wall 13 of the dispenser box are handles 39 and 40.

Rigidly mounted on the shafts 29 and 30 are pinion wheels 41 and 42. The teeth of the pinion wheel 41 enter the holes 24 to engage the dispenser slide plate 21 for movement as will later be described.

The tongue blades to be dispensed are a standard flat round ended blade such as that shown at 11 in Fig. 10 and as shown in detail in Fig. 7.

In preparing the device for use, the sterilized tongue blades 11 are stacked in piles and placed in the sanitary cardboard packing box with a cardboard separator 12 therebetween, as illustrated in Figures 3, 5 and 10. The package containing the sterilized tongue blades is sealed and presents an appearance such as illustrated in Fig. 9. It is packages of this type that will be carried as a regular stock item in drug stores or supply houses.

Now to prepare the package of sterile tongue blades for placement in the tongue blade dispenser, the flaps *j* and *k* are pulled open and torn from the box along the perforated lines *h* and *i*, thereby leaving an elongated opening in one end of the bottom of the box and which had been closed by the flap *j*, and leaving another shallow opening across the end wall L and at the bottom thereof, as illustrated in Fig. 10, the slot in the end wall L being just deep enough that the tongue blades 11 can be passed therethrough, one at a time.

The tongue blade package having thus been prepared, the dispenser cover 17 is rocked upwardly to open the top of the dispenser box, whereupon the opened lower portion of the tongue blade package is entered into the top of the dispenser box and the tongue blade package is then pressed all the way into the dispenser box so that the bottom M of the tongue blade package rests on the bottom 18 of the dispenser box and whereupon the shallow opening in the end wall L of the tongue blade package box will register with the slots 19 and 20 in the end wall 16 of the dispenser box; and the exposed ends of the tongue blades 11 that appear in the opening left by the flap *j* will overlie the slots 26 and 27*a* in the bottom 18 of the dispenser box; and the upwardly projecting dispenser pins 25 and 26*a* will rest against the rounded end 11*a* of the bottom tongue blade in each pile of the tongue blades in the package.

Now by pressing downwardly on, or by partially rotating either one of the handles 39 or 40, its respective pinion wheel 41 or 42 will revolve to move its respective dispenser slide plate 21 or 22 toward the slots 19 and 20 in the end wall 16, whereupon the dispenser pins 25 and 26*a* will move in their respective slots 26 and 27*a* and push the lower tongue blade 11 in the pile of tongue blades to and partially through its respective slot 19 or 20 so that the end of the tongue blade will project therefrom as shown in Fig. 5 and whereupon it may be grasped between the fingers of the user and pulled from the box and used.

When the handle 39 or 40 is released, the spring 28 will return its respective slide plate 21 or 22 to its original position, whereupon the dispenser feed pins 25 and 26*a* will return to their original position against the end wall 15 of the dispenser box and when the lower tongue blade is pulled from the box, the pile of tongue blades resting thereon will drop downwardly so that a new tongue blade on the bottom of the pile will replace the one that has been removed therefrom and in so doing, the rounded end 11*a* of the new tongue blade will be positioned before the dispenser pins 25 and 26*a* preparatory for repeating the dispensing action as above described.

If it should happen that the pile of tongue blades in moving downwardly in the packing box should rest on top of the dispenser pins 25 and 26*a*, the beveled or sloping top thereof would guide or skid the pile forward so the lower tongue blade would definitely lay flat on the bottom of the box in perfect position for the dispenser pins 25 and 26*a* to properly engage the end of the tongue blade for the movement thereof as above described.

Such modifications of my invention may be employed as lie within the scope of the appended claim without departing from the spirit and intention of the invention. Now having fully shown and described my invention what I claim is:

In a sanitary packing and dispenser carton for holding piles of sterilized tongue blades and a dispenser container for said carton; the combination of a dispenser container and a removable and replaceable sanitary tongue blade carton of the type aforesaid, in said container, said dispenser container comprising a box like element having a close fitting cover thereon, the sides and ends of said containers extending below the bottom of said container to form a housing for a tongue blade dispensing mechanism, one end of said container having openings therein at the floor line of the container, said openings being positioned before the bottom blade in each pile of blades in the carton, the floor member of said container having pairs of elongated slots therein and at the opposite end of the container from the end wall having the aforesaid openings therein, said slots being positioned, one pair under each pile of tongue blades in said carton and running longitudinally with said piles of tongue blades, slide plates, said plates being positioned against the under side of the said floor member of the container and being positioned, one covering each pair of said slots, and means for slidably holding said slide plates in said position, pairs of ejector pins, said pairs of pins being positioned, one pair on each of said slide plates and projecting through their respective pairs of slots for each slide plate and extending above the upper surface of the container floor element, and spring means for yieldably holding said slide plates in retracted position, pin wheels, one for and in engagement with each of said slide plates, shafts, one for and carrying each of said pin wheels, said shafts being revolvably carried in bearings positioned within the aforesaid housing for the tongue blade dispensing mechanism, one end of said shafts projecting through the lower side wall portion of the container, and means on the projecting end of each of said shafts for turning the shaft for tongue blade ejecting purposes, said carton having piles of sterilized tongue blades therein, said carton having scored normally sealed and removable portions which, when removed provide openings in the end and bottom of said carton which, when the carton is placed in said container will register with the openings in the end wall of the container and will permit the passage of said ejector pins therethrough to engage the bottom tongue blade of each pile for ejecting sterilized tongue blades, one at a time through the said openings in the end wall of the container, the cover of said container bearing against the top of the carton therein to insure proper positioning of the carton

in the container for proper tongue blade ejecting purposes.

SAMUEL H. ARCHER.

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