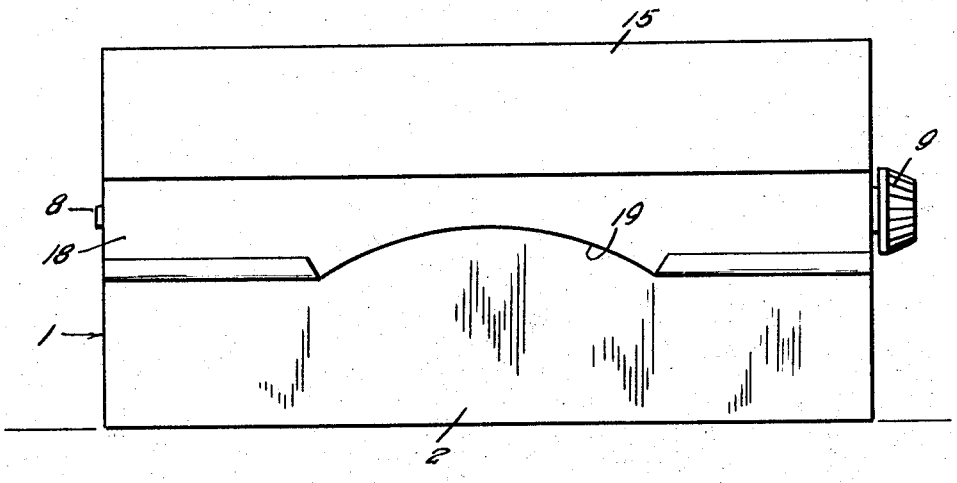
Aug. 25, 1931. C. E. WELLS 1,820,517

COMB STERILIZER

Filed June 6, 1930 3 Sheets-Sheet 1

Fig. 1.



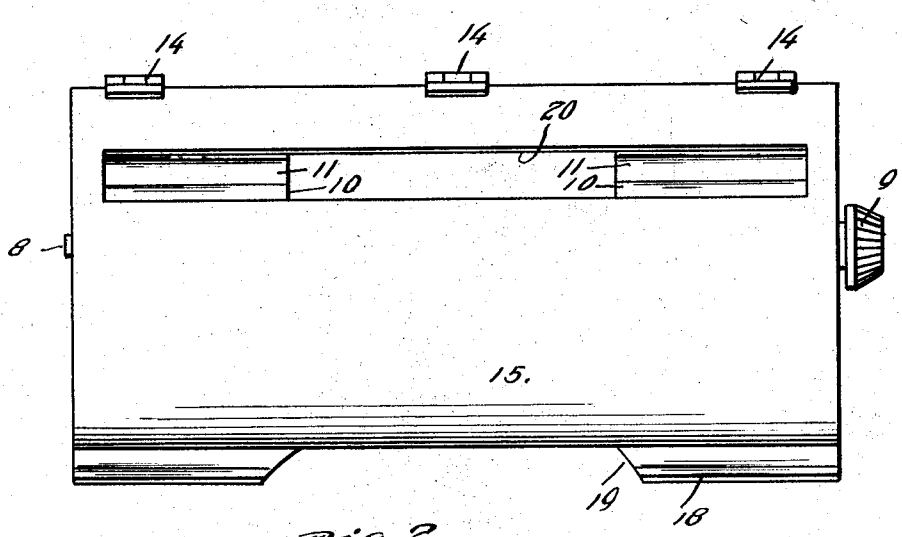


Fig. 2.

Inventor

C. E. Wells

By Clarence A. O'Brien

Attorne

Aug. 25, 1931. C. E. WELLS 1,820,517

COMB STERILIZER

Filed June 6, 1930 3 Sheets-Sheet 2

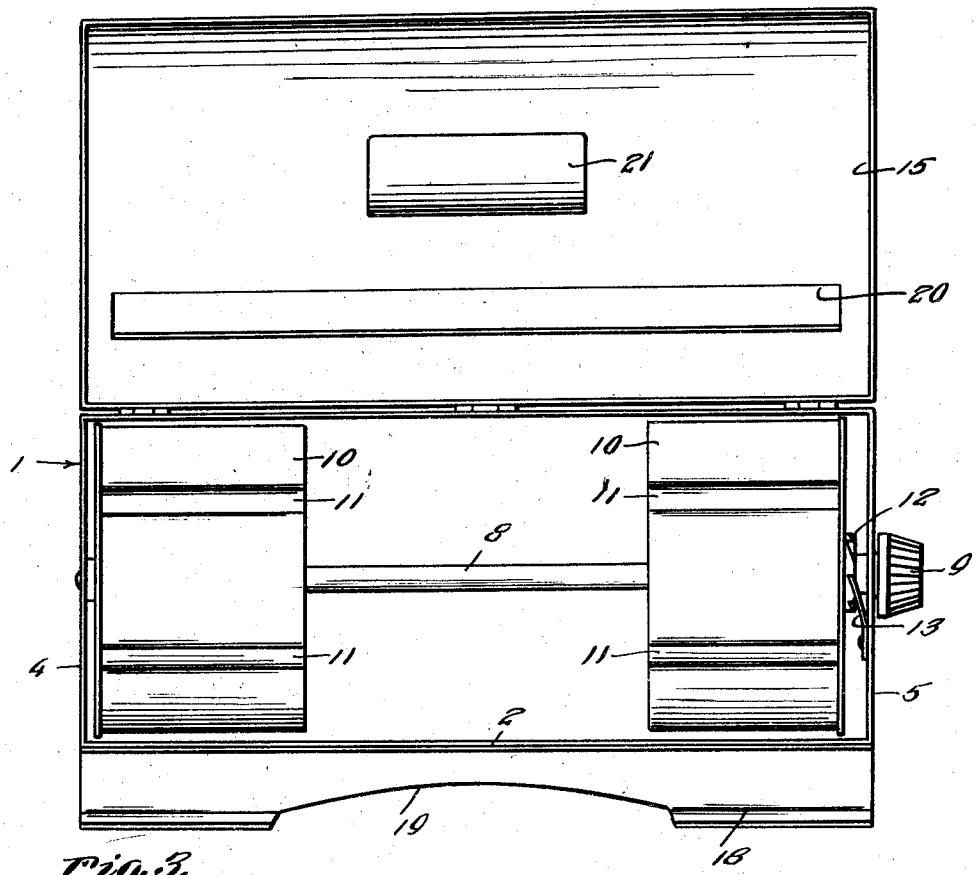


Fig. 3.

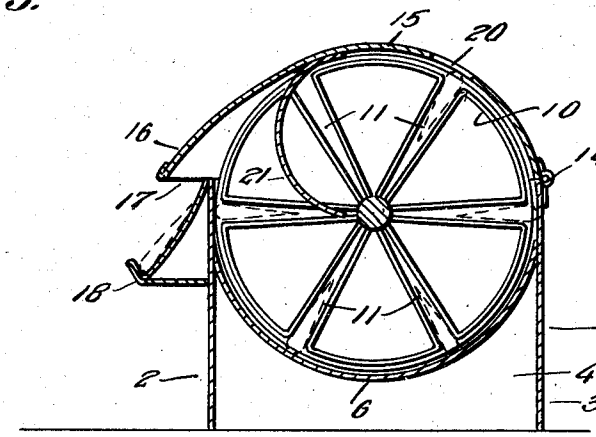


Fig. 4.

Inventor

C. E. Wells

By Clarence A. O'Brien

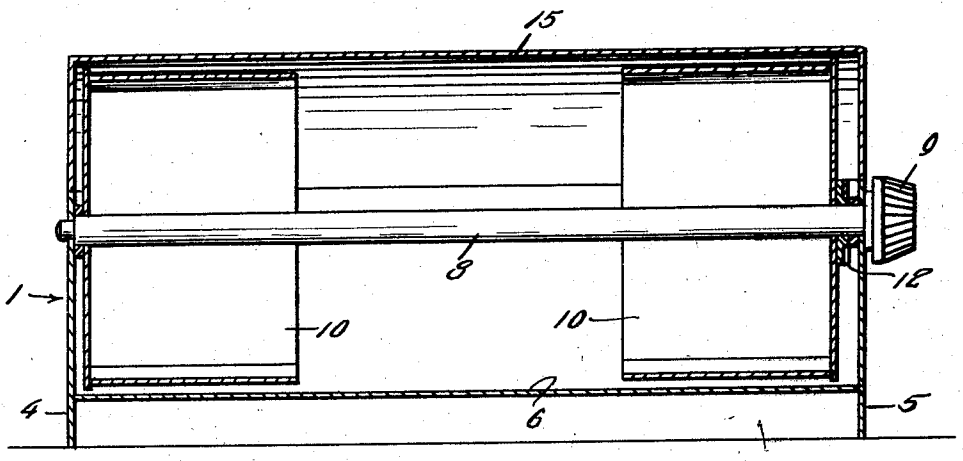
Attorney

Aug. 25, 1931. C. E. WELLS 1,820,517

COMB STERILIZER

Filed June 6, 1930 3 Sheets-Sheet 3

Fig. 5.



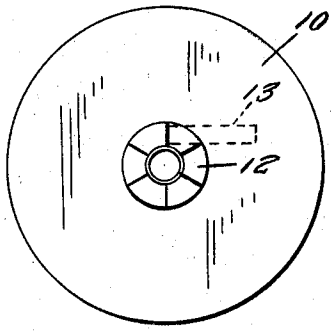


Fig. 6.

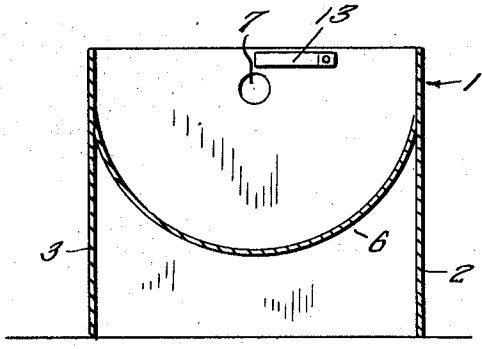


Fig. 7.

Inventor

C. E. Wells

By Clarence A. O'Brien

Attorney

Patented Aug. 25, 1931 1,820,517

UNITED STATES PATENT OFFICE

CARL E. WELLS, OF ESTHERVILLE, IOWA

COMB STERILIZER

Application filed June 6, 1930. Serial No. 459,455.

This invention relates to a comb sterilizer particularly for use in barber shops but it is to be understood that a sterilizer in accordance with this invention may be used for any purpose for which the same is found adapted and desirable.

The primary object of the invention is to provide, in a manner as hereinafter set forth, a comb sterilizer of the aforementioned character embodying rotatable means for supporting a plurality of combs in a manner to submerge the same in the sterilizing fluid and further including means for ejecting said combs one at a time.

Another important object of the invention is to provide a comb sterilizer of the character described embodying a construction and arrangement of parts whereby the ejected comb has been raised out of the sterilizing fluid prior to its ejection for a length of time sufficient to permit the same to dry.

Other objects of the invention are to provide a comb sterilizer of the character set forth which will be comparatively simple in construction, strong, durable, highly efficient in its use and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a view in front elevation of a comb sterilizer constructed in accordance with this invention.

Figure 2 is a top plan view thereof.

Figure 3 is a top plan view of the device with the cover in open position.

Figure 4 is a vertical transverse sectional view through the device with the cover in closed position.

Figure 5 is a vertical longitudinal sectional view thereof.

Figure 6 is a detail view in end elevation of the comb supporting drum having a ratchet disk mounted centrally thereon.

Figure 7 is a detail view in vertical cross section through the tank and showing the spring pawl which is engageable with the ratchet disk in a manner to permit rotation of the drum in one direction.

Referring to the drawings in detail, it will be seen that the reference numeral 1 designates generally the tank which includes the front wall 2, a rear wall 3, the end walls 4 and 5 and the elevated concave bottom 6. The end walls 4 and 5 are provided with openings 7 (see Figure 7) in which are rotatably supported the opposite end portions of the shaft 8 which extends longitudinally through the tank 1. It may be well to here state that the tank 1 is open at its top and the openings 7 are disposed adjacent said top. One end of the shaft 8 projects through the end wall 5 of the tank 1 and has fixed thereon an operating knob 9.

Drums 10 are fixed on opposite end portions of the shaft 8 within the tank and are formed to provide a series of circumferentially spaced substantially V-shaped slots 11 for the reception of the opposite end portions of the combs to be sterilized as illustrated to advantage in broken lines in Figure 4 of the drawings. Fixed centrally on one of the drums and encircling the shaft 8 adjacent the end wall 5 of the tank 1 is a ratchet disk 12 which is operatively engaged by a spring pawl 13 for permitting rotation of the shaft and the drums in one direction only. The pawl 13 is mounted on the end wall 5.

Hingedly mounted as at 14 on the upper edge of the rear wall 3 of the tank 1 is a swingable cover 15 having a forwardly projecting free end portion 16 extending beyond the front wall 2 of the tank in a manner to provide an outlet opening 17. The opening 17 is disposed above a trough 18 mounted on the front wall 2 of the tank for the reception of the ejected combs, said trough 18 being provided with an intermediate recess 19 to facilitate removal of the combs therefrom. The cover 15 is provided with an elongated longitudinally extending slot 20 providing means for inserting the combs in the recesses 11 of the drums 10 without the necessity of raising said cover

15. Depending from the inner side of the cover 15 intermediate the drums 10 is an arcuate ejector 21 which is engageable with the comb as the drum is rotated to move the same out of the recesses 11 and permit said combs to gravitate through the outlet 17 into the trough 18.

In use, the combs are inserted in the recesses 11 of the drums 10 through the elongated slots 20 in the closure or cover 15. When a comb is disposed in each pair of recesses of the drums 10, said drums are rotated in a manner to immerse the same in the sterilizing fluid in the tank 1. A continued rotation of the drums will bring the combs successively into engagement with the ejector 21 and, as before stated, said combs are deposited in the trough 18.

When the barber or other person has finished using one comb and desire a freshly sterilized one, he inserts the used comb through the slot 20 and then rotates the drums through the medium of the knob 9 a distance corresponding to the distance between the recesses 11. At this point the pawl 13 will drop in to another of the teeth on the disk 12 and the comb which is closest to the opening 17 will be engaged with the ejector 21 and deposited in the trough 18. It will be noted that the comb which has just been ejected and which was closest to the opening 17 was raised out of the sterilizing fluid and had sufficient time to become dry.

It is believed that the many advantages of the comb sterilizer constructed in accordance with this invention will be readily understood, and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of construction may be had which will fall within the scope of the invention as claimed.

What is claimed is:—

1. A comb sterilizer of the character described comprising a tank for the reception of a sterilizing fluid, a shaft mounted for rotation in the tank, a pair of drums mounted in longitudinally spaced relation on the shaft for rotation therewith and having aligned pairs of recesses therein for the reception of the opposite end portions of the comb, a closure mounted on the tank above the drums and having an elongated slot therein constituting means for inserting the combs in the recesses of the drums, and an ejector depending from the closure between the drums and engageable with the combs in a manner to successively remove the same from the drums upon rotation of said drums.

2. A comb sterilizer of the character described comprising a tank for the reception of a sterilizing fluid, a shaft mounted for rotation in the tank, a pair of drums fixed in longitudinally spaced relation on the shaft for rotation therewith and having pairs of aligned recesses therein for the reception of the opposite end portions of the combs to be sterilized, a closure hingedly mounted on the tank and projecting beyond one wall thereof at its free end in a manner to provide an outlet opening, a trough disposed beneath the outlet opening, and an ejector mounted on the closure and extending therefrom between the drums and engageable with the combs in a manner to successively eject the same through the outlet openings from the drums upon rotation of said drums.

3. A comb sterilizer of the character described comprising a tank for the reception of a sterilizing fluid and having a concave bottom, a shaft rotatably mounted in the tank and extending longitudinally therein, means for preventing rotation of the shaft in one direction, means for manually actuating the shaft in the opposite direction, a pair of drums fixed in spaced relation to each other on the shaft within the tank and having portions thereof submerged in the sterilizing fluid, said drums being further provided with aligned pairs of recesses for the reception of the opposite end portions of the combs to be sterilized, a closure hingedly mounted for swinging movement on one side of the tank and having its free end, when in closed position, projecting beyond the opposite side of the tank in a manner to provide an outlet opening, a trough mounted on the tank beneath the outlet opening, an ejector mounted on the closure and depending therefrom between the drums, said ejector engageable by the combs in a manner to eject said combs successively through the outlet opening upon rotation of the drums, the closure being further provided with an elongated slot constituting means for inserting the combs in the recesses in the drums.

In testimony whereof I affix my signature.

CARL E. WELLS.