July 30, 1929. F. L. DAILEY 1,722,903

DENTAL COTTON HOLDER

Filed April 28, 1928

FIG. 1

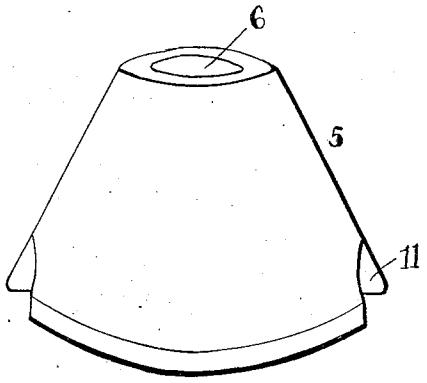


FIG. 2

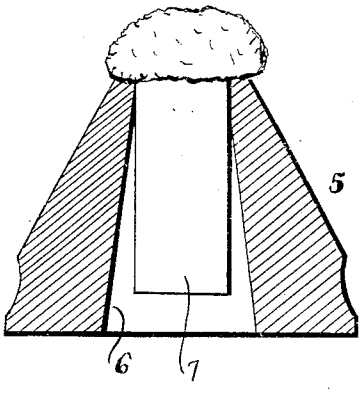


FIG. 3

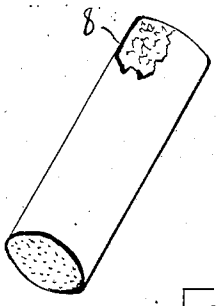


FIG. 4

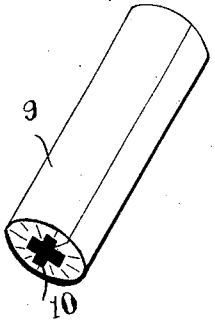
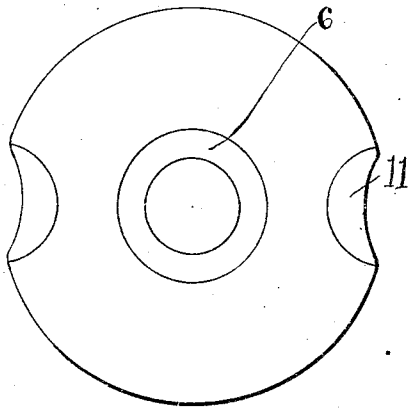


FIG. 5



Inventor

FRANK L. DAILEY

By Jack Richmond

Attorney

Patented July 30, 1929. 1,722,903

UNITED STATES PATENT OFFICE.

FRANK L. DAILEY, OF NEW BRUNSWICK, NEW JERSEY, ASSIGNOR TO JOHNSON & JOHNSON, OF NEW BRUNSWICK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

DENTAL COTTON HOLDER.

Application filed April 28, 1928. Serial No. 273,675.

In the practice of dental surgery the operative has occasion to employ absorbent cotton in swabbing and otherwise treating root canals and other cavities of the teeth. For this purpose, he has his choice of prepared or moulded cotton pellets or pledgets or of abstracting with the aid of tweezers the required amount of cotton from bulk stock. The latter method is that generally favored by the profession and it is to that method or practice that the present invention is particularly addressed in that it was devised to insure the welfare of the patient by providing for single use sterile stock.

With that aim in view, the nature of the invention may briefly be stated as the provision of a holder and a cartridge or roll of cotton which frictionally may be drawn through a differential bore of the holder and having served its purpose may be replaced by a fresh roll or cartridge.

The preferred embodiment is illustrated in the accompany drawings, wherein

Figure 1 is a perspective view of a dental roll holder.

Fig. 2 is a sectional view of the same in charged state.

Figs. 3 and 4 are views of cotton rolls or cartridges.

Fig. 5 is a bottom view of the holder.

The holder 5 is a cone shape body of metal or refractory material, the shape and weight operating to prevent tilting or other casual displacement under stress of use. It is formed or provided with an axial bore 6 forming a continuous passage from the base to the apex of the cone and designed for the reception of a cartridge or cylindrical stick or roll of cotton as indicated at 7. The bore is of differential diameter in order frictionally to engage the cotton and thus retard its withdrawal under the application of tweezers. For this purpose it tapers upwardly or in the direction of its outlet, it being understood that the roll or cartridge is introduced from below.

The rolls contain enough cotton for the needs of the average patient and at any rate the holder is intended to be restocked or charged between patients.

The sterility of the roll is insured by factory packing and by the use of, for example, a glaze envelope 8, or a paper wrapper 9 whose end seal 10 readily can be broken by the surgeon's tweezers after the cartridge is in place, so that the hands need not come in direct contact with the cotton.

The side wall has opposed undercut slots 11 to facilitate handling.

Having described my invention, I claim:

1. An appliance for dental use comprising a body having the necessary shape and weight to resist casual displacement, and having an unobstructed bore for the reception of a roll of cotton, the bore being tapered in the direction of its outlet to permit the upward withdrawal of the roll under frictional resistance.

2. An appliance for dental use comprising a cone shape body having an unobstructed axial bore or passage extending from its base to its apex and designed to receive a roll of cotton, the bore being tapered to permit the upward withdrawal of the roll under yielding resistance, and undercut slots to facilitate handling.

3. An appliance for dental use, comprising a self-sustained body having a continuous axial passage for the reception of a cotton roll or cartridge, the inlet exceeding and the outlet being of less diameter than the roll, and a sealed single use cartridge adapted to said passage, the outlet being unobstructed whereby the sealed cartridge in part or in entirety may pass therethrough.

In testimony whereof I affix my signature.

FRANK L. DAILEY.