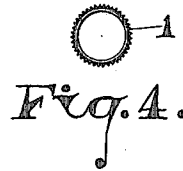
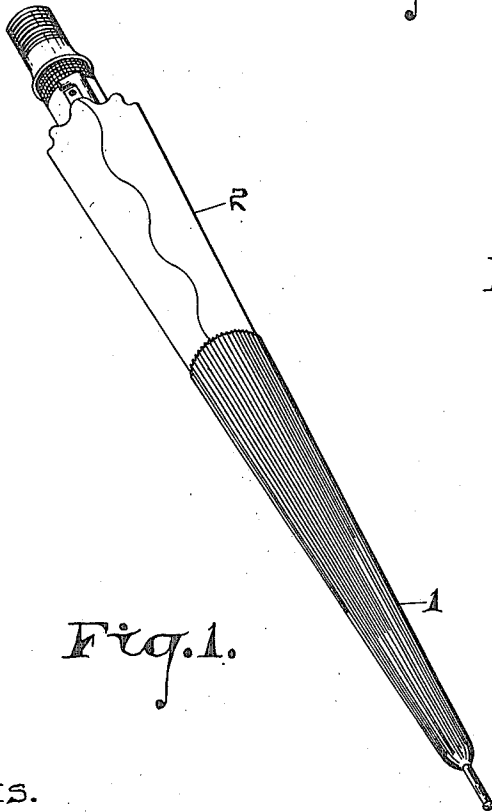
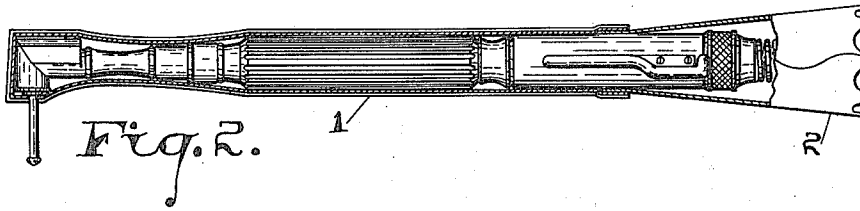


L. L. MARTIN & R. A. McTAVISH.
HYGIENIC PROTECTOR FOR DENTAL HANDPIECES.
APPLICATION FILED APR. 25, 1914.

1,162,941.

Patented Dec. 7, 1915.



WITNESSES.

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LOUIS L. MARTIN AND ROBERT A. McTAVISH, OF TORONTO, ONTARIO, CANADA.

HYGIENIC PROTECTOR FOR DENTAL HANDPIECES.

1,162,941.

Specification of Letters Patent.

Patented Dec. 7, 1915.

Application filed April 25, 1914. Serial No. 834,397.

To all whom it may concern:

Be it known that we, LOUIS L. MARTIN and ROBERT A. McTAVISH, of 81 Peter street, in the city of Toronto, county of York, Province of Ontario, Canada, have invented certain new and useful Improvements in Hygienic Protectors for Dental Handpieces, of which the following is a specification.

Our object is to devise means for preventing contagion being conveyed to a patient's mouth from dental hand pieces which necessarily have been used in the mouths of other patients and which cannot be effectively sterilized, without injuring their internal parts.

We attain our object by providing the hand piece with a flexible cover, preferably waterproof, which is treated with a suitable antiseptic. The cover is adapted for the passage of the drill and is preferably provided with a skirt of extra flexibility at the end remote from the drill, which allows for the reciprocation of the part of the hand piece usually movable to tighten or release the drills and permits of the ready release of the slip joint connecting the hand piece to the flexible support.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is a perspective view of our invention as applied to a dental hand piece in which the drill is in alinement with the axis of the hand piece. Fig. 2 is a similar view showing our invention as applied to a hand piece with the drill at right angles to the axis of the hand piece. Fig. 3 is a side elevation of a modified form of protector; and Fig. 4 an end view of a protector.

In the drawings like numerals of reference indicate corresponding parts in the different figures.

In carrying out our invention we form a tube of some suitable more or less flexible material. In practice we find that paper is the only suitable substance, as it is cheap and is capable of being waterproofed, sterilized or treated with an antiseptic solution to answer the purposes of our invention.

The cover 1 is suitably shaped to closely fit the hand piece. The cover is also preferably longitudinally corrugated which gives it elasticity so that it may be readily slipped

over the somewhat irregularly shaped hand piece and yet will closely hug the same. An opening for the passage of the drill is formed either in the end as shown in Fig. 1 or in the side as shown in Fig. 2, according as the drill extends from the end or side of the hand piece.

The fiber is waterproofed in any suitable manner and is also treated with any antiseptic solution which will not destroy the fiber or affect the waterproofing. After completion, it is preferably thoroughly sterilized, as, for example, by being treated in a steam chamber or by being exposed to the vapors of formaldehyde.

Preferably a short skirt 2 of material more flexible than the rest of the cover is secured thereto or formed thereon. This arrangement is advantageous as the parts of the hand piece usually extended and contracted to release or grip a drill may be operated without removing the protector as the fingers of one hand may be used to grip the forward part of the hand piece and the fingers of the other hand the rearward part of the hand piece through the protector, the skirt wrinkling up and stretching out as the parts are moved. The latch of the slip joint is also easily operated through the skirt. The forward part of the device is very easily slipped in place on the hand piece and effectively prevents contact between the metal surfaces of the hand piece and the mouth or lips of the patient. After the drill has been used on a patient, the cover is thrown away and replaced by a fresh one for the next patient. The covers or protectors are very cheap, and it is no particular burden on a dentist to use a fresh cover with every patient, thus assuring his patients that nothing will contact with their lips or mouths which has come in contact with the lips or mouth of another patient who may be afflicted with an undesirable disease.

What we claim as our invention is:

1. A hygienic protector for dental hand pieces comprising a flexible longitudinally corrugated waterproof tubular paper cover adapted to be removably fitted over said hand piece.

2. A hygienic protector for dental hand pieces comprising a flexible waterproof tu-

bular paper cover adapted to be removably fitted over said hand piece; and a skirt of more flexible material at the end remote from the drill end of the hand piece.

- 5 3. A hygienic protector for dental hand pieces comprising a longitudinally corrugated waterproof tubular paper cover adapted to be removably fitted over said hand piece; and a skirt of more flexible material

at the end remote from the drill end of the 10 hand piece.

Toronto, this 21st day of April A. D. 1914.

LOUIS L. MARTIN.

ROBERT A. McTAVISH.

Signed in the presence of—

J. EDW. MAYBEE,

E. P. HALL.