

(No Model.)

C. P. LENNOX.
DENTAL TOOL.

No. 478,343.

Patented July 5, 1892.

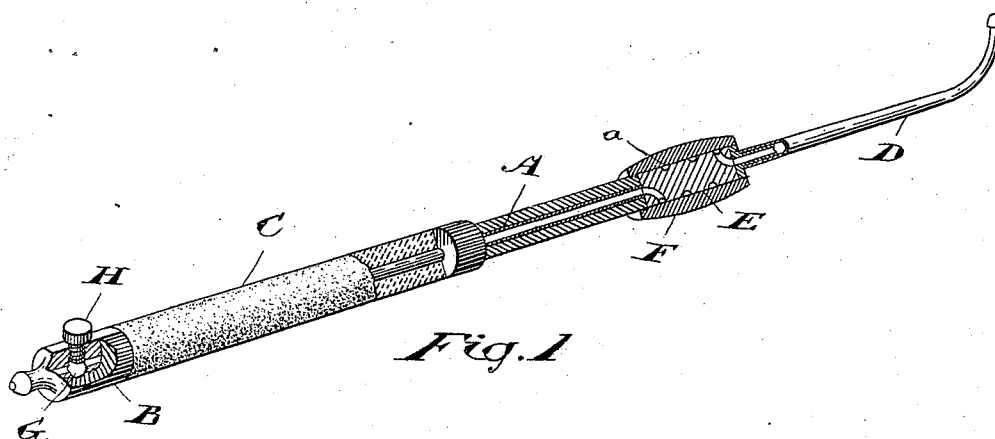


Fig. 1

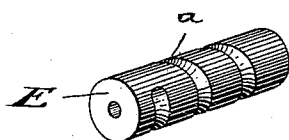


Fig. 2

Witnesses

J. Edwin Mayhew
W. G. McMillan

Inventor

Chas. P. Lennox
by Donald G. Ridout & Co
Attys.

UNITED STATES PATENT OFFICE.

CHARLES P. LENNOX, OF TORONTO, CANADA.

DENTAL TOOL.

SPECIFICATION forming part of Letters Patent No. 478,343, dated July 5, 1892.

Application filed December 11, 1891. Serial No. 414,651. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PARKER LENNOX, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented a certain new and Improved Dental Instrument, of which the following is a specification.

The object of the invention is to design a dental instrument by which nitrous oxide may be readily and effectually applied to the diseased portion of the tooth before preparing the cavity; and it consists, essentially, of a tube connected at one end by a flexible tube to a reservoir containing nitrous oxide or other suitable anæsthetic, the hole in the other end of the tube being reduced in size, so that only a small jet of anæsthetic will be discharged onto the diseased portion of the tooth, a core having a spiral groove cut around its circumference to connect with the hole in the tube and incased in a tightly-fitting outer casing being placed in the tube, so that the nitrous oxide or other suitable anæsthetic is checked in its flow through the tube sufficiently long to become heated by the application of heat to the outer casing, substantially as hereinafter more particularly explained.

Figure 1 is a view of my dental instrument partially in section to expose its interior construction. Fig. 2 is a detail of a core with a spiral groove cut around it.

In the drawings, A is a tube, which, as indicated by the drawings, is preferably made in sections suitably connected together. The end B is made sufficiently large to act as a ferrule, against which the end of the handle C butts. The end B is shaped, as indicated, so that the tube leading to the reservoir of nitrous oxide or other anæsthetic may be readily fitted onto it. The small end D is reduced in size and is curved, so that it may be readily made to direct the anæsthetic upon the tooth, the aperture of this latter end of the tube being reduced in size, so that a small jet of anæsthetic under pressure may be directed against a diseased portion of the tooth.

E is a solid core having a spiral groove *a* cut around its periphery and inclosed in a tightly-fitting outer casing F. The spiral

groove *a* is so cut that it connects with the hole in the tube A.

In applying the anæsthetic to the tooth the outer casing F is held over a spirit-lamp or otherwise heated, so as to warm not only the outer casing F, but also the core E. Both the casing and the core are heated, so as to warm the nitrous oxide or other anæsthetic as it passes around the core through the spiral groove *a*, which is the only passage by which the anæsthetic can reach the tube on the other side of the core. In the end B, I make a cavity G, provided with a plug H, and connecting with the hole through the tube A. This cavity may be filled with chloroform or any mixture desired, so that the nitrous oxide or other anæsthetic will absorb in passing through the cavity and will be impregnated therewith.

It will be seen from this description that by using my instrument nitrous oxide or any other suitable anæsthetic may be applied to a diseased tooth and the cavity cleaned out without causing any inconvenience or pain to the patient.

What I claim as my invention is—

1. A tube shaped substantially as shown and designed to be connected by a flexible tube to a reservoir of nitrous oxide or other suitable anæsthetic, in combination with a spiral groove arranged to connect with the passage-way in the tube, the said spiral groove being incased, substantially as and for the purpose specified.

2. A tube shaped substantially as shown and designed to be connected by a flexible tube to a reservoir of nitrous oxide or other anæsthetic, a cavity G, formed in the tube around its passage-way, a plug H, to close the said cavity, in combination with a core E, having a spiral groove *a* made around it, and an outer casing fitted tightly to the core E and to inclose the spiral groove *a*, which connects with the passage-way in the tube, substantially as and for the purpose specified.

Toronto, November 30, 1891.

CHARLES P. LENNOX.

In presence of—

I. EDW. MAYBEE,
F. C. WOODWARD.