(No Model.)

C. C. FREEMAN.

MACHINE FOR POLISHING AND COMPRESSING TOOTH PIOKS.
No. 358,029 .
Patented Feb. 22, 1887.


# United States Patent Office. 

CHARLES C. FREEMAN, OF DIXFIELD, ASSIĠNOR TO CHARLOTTE M.<br>FORSTER, OF BUCKFIELD, MAINE.

## MACHINE FOR POLISHING AND COMPRESSING TOOTH-PICKS.

SPECIFICATION forming part of Letters Patent No. 358,029, dated February 22, 1887.

Application filod September 30, 1881. Serial No. 42,909 . (No model.)

## To all whom it may concern:

Be it known that I, Charies C. Freeman, a citizen of the United States, residing at Dixfield, in the comnty of Oxford and State of
5 Maine, have invented a new. and useful Machine for Polishing, Compressing, Rounding, and Pointing Tooth-Picks, of which the following is a specification.
My invention has for its object the produc-
to tion of a pointed, rounded, polished, and compressed wooden tooth-pick, and of mechanism for accomplishing that result.

It has been common to manufacture wooden tooth-picks by machinery; but the tooth-picks
I5 thus manufactured are somewhat rough, and have not sufficiently fine points. Tooth-picks made by hand are generally smoothed and provided with fine points; but both in the case of machine-madeand hand-made tooth-picks they
20 are, being made of wood, of a certain degree of softness and not, sufficiently hard and firm to readily serve the purpose of a good toothpick.

My invention contemplates the making in a machine a tooth-pick which shall be so com pressed as to be hard and firm, and shall be polished and finely pointed.

The mechanism by which I accomplish this object consists of devices for so manipulating
30 the ordinary wooden tooth pick as made on the machines now in use as will convert it into a polished, rounded, compressed, and pointed tooth-pick.

In the drawings I have shown, in Figure 1, a
2 a transverse section of the same, and in Fig. 3 one of the tooth-picks polished, compressed, and pointed thereon.

A is a revolving wheel or cylinder, with its
40 periphery slightly concave and covered with a band of leather, india-rubber, or other suitable elastic substance, a.
$B$ is the frame of the machine.
C is a stationary apron, forming the segment of a circle, c c c. These segments are united so as to form the apron C by means of the
band $d$, made of any suitable elastic material, to which the segments $c \quad c e$ are attached. These segments are severally adjustable by $5^{\circ}$ means of the set-screws D D D, one of which is placed opposite the center of each of the segments $c c c$.
$\mathbf{E}$ is the pulley for driving the cylinder $A$.
$F$ is a table for holding the tooth-picks to be fed to the machine.
$G$ is the shaft of the cylinder $A$.
The apron C is made concave upon its inner face, so as to leave between it and the periphery of the cylinder A a space of the form of 60 the tooth-piek when finished, as shown in Fig. 2. The elastic surfaces upon the apron $C$ and the cylinder A are to be covered with fineground quartz, glass, or any other substance suitable for polishing wood.

The operation of my machine is as follows: The tooth-picks are fed from the table $F$ between the cylinder $A$ and the apron $C$ at $a$. These tooth-picks are square in section. By the revolution of the cylinder A they are rolled forward and discharged at $b$. The distance between the cylinder and the apron is gradually lessened from $a$ to $b$ by means of the setscrews D.

By means of the operation described the tooth-pick is made round, smooth, and polished and compressed, and provided with fine points.

What I claim, and desire to secure by Letters Patent, is-

1. The machine for polishing, rounding, compressing, and pointing tooth-picks, consisting of the cylinder $A$, the apron $C$, made of the segments $c e c$, adjustable by the set-screws D D D, the pulley E , the shaft $G$, the frame $\mathrm{B}, 8$ and the table F.
2. In a machine for rounding, compressing, polishing, and pointing tooth-picks, the cylinder A, table F, and the apron C , in combination.
3. In a machine for rounding, compressing, polishing, and pointing tooth-picks, the cylinder A, having a concave periphery and furnished with the elastic band $a$, in combina.
tion with the table F and a suitable opposing surface for compressing the tooth-picks fed into the machine.
4. In a machine for rounding, compressing, 5 polishing, and pointing tooth-picks, the apron C , formed of the segments $c c c$, and made concave upon its inner surface aud furnished with the elastic band $a$, in combination with a
suitable table, from which the tooth-picks are fed, and a suitable revolving and opposed sur- 10 face, by means of which the tooth-picks are compressed.

CHARLES C. FREEMAN.
Witnesses:
H. J. De Shon,
D. Porter Stowidl.

