

L. E. DEUDON.
TABLE PEPPER GRINDER.
APPLICATION FILED MAR. 4, 1911.

997,969.

Patented July 18, 1911.

FIG. 1

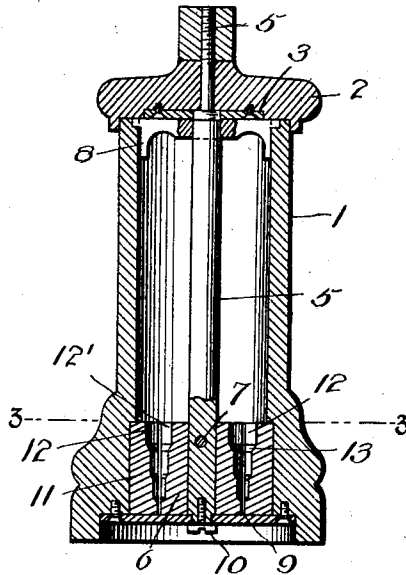


FIG. 2

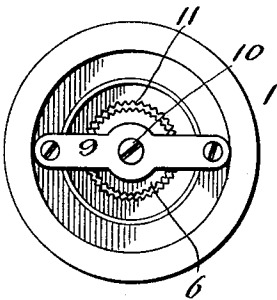


FIG. 3

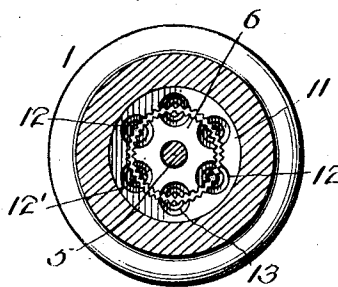


FIG. 4

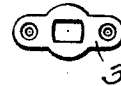
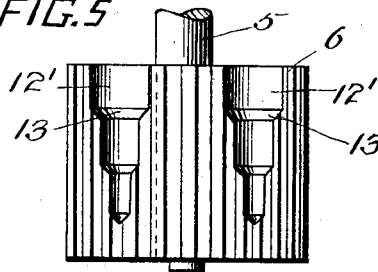


FIG. 5



WITNESSES:

H. F. Royce
C. M. Catlin

INVENTOR

L. E. Deudon

BY

Wm. R. Catlin
Attorney

UNITED STATES PATENT OFFICE.

LAURENT ELOI DEUDON, OF ELGIN, ILLINOIS.

TABLE PEPPER-GRINDER.

997,969.

Specification of Letters Patent.

Patented July 18, 1911.

Application filed March 4, 1911. Serial No. 612,188.

To all whom it may concern:

Be it known that I, LAURENT E. DEUDON, a resident of Elgin, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Table Pepper-Grinders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to table pepper holders of the class which receive whole pepper seeds and grind them up little by little as pepper is wanted by individual users.

In devices of this general character heretofore proposed objections have been found, particularly because of their construction it was necessary always to turn the grinder in a certain direction, and many users were ignorant which way to turn, which was troublesome. Heretofore in such devices the grinding members, or at least one of them, has been conical, or has had spirally arranged grinding teeth, and as a rule the teeth have been ratchet shape and thus adapted to be operated in one direction only.

My invention consists in the construction hereinafter described and particularly pointed out in the claims, whereby the above mentioned and other difficulties are overcome.

In the accompanying drawing which illustrates the invention and forms part of the specification,—Figure 1 is a vertical section of the improved device; Fig. 2 is a bottom plan view thereof; Fig. 3 is a plan view of the two grinding members showing the registering grooves; Fig. 4 is a plan view of a plate for connecting spindle and operating cover-handle; Fig. 5 is an enlarged elevation of the movable grinding member.

The holder 1 is of wood or other suitable material and of convenient sizes and shapes for table use. On its top is cover 2 adapted to be turned freely on the holder body in either direction. Secured in the bottom of the cover is a plate 3 having a non-round hole centrally located and adapted to fit a non-round part of the spindle 5 of the movable grinding member 6 which is secured to the lower end of the spindle by a pin 7 or otherwise. The cover is held on the spindle by a thumb nut. At the top of the holder body is secured a cross bar 8 having a central round hole forming a bearing for the

upper end of the spindle, and at the bottom is secured a cross bar 9 into a hole in which a reduced end of the spindle fits, being held therein by a screw 10.

Within the bottom of the holder is fitted and secured the fixed grinding member 11 which is in the form of a sleeve, preferably slightly tapering on the exterior, but having a cylindrical opening through it. This cylindrical bore has longitudinal ribs or teeth on its surface of true V-shape (as distinguished from ratchet-like teeth having sides of unequal length and pointing in one direction), said teeth extending in lines parallel to the axial line of the spindle. Said inner surface of member 11 also has a series of half-round stepped holes or grooves 12 extending from the top to approximately one fourth of its height from the bottom. Each of said grooves comprises a plurality of short grooves decreasing in size from the top, that is, the upper short groove is the largest, the next smaller, and the third smaller still. The walls of the short grooves are all parallel to the axial line except that they are joined by downwardly inclined steps 13. Below the smallest part of said grooves the surface has the longitudinal teeth, as has the entire surface except the part removed by the stepped grooves. The rotatable grinding member 6 is likewise formed with the same number of stepped grooves 12' in its outer surface, and these are adapted to register with those in member 11. Member 6 also has V-teeth below and between said grooves.

The teeth on the two grinding members do not touch in rotating but just clear each other, whereby they do not wear rapidly in use and continue to grind to the desired fineness.

When the parts of the device are assembled, as in Fig. 1, and the grooves in members 6 and 11 register there are formed six (or other number) circular holes into the top of which whole pepper seeds can enter. When the cover or handle is turned, thereby turning member 6, the sharp vertical corners at the edges of the upper and largest parts of the grooves break the seeds into two or more pieces which will be small enough to fall into the next smaller parts of the holes, and will there be again broken until finally the pepper particles work into the small space between the grinding members at the lower end and are finally com-

minuted by the longitudinal teeth. Some small particles may also be formed by the first or second breaking of the seeds which may be carried in between the toothed or roughened surfaces before reaching the bottoms of the holes and be powdered by action of the teeth.

The inclined steps between the groove sections serve to guide the pepper to the section below.

The described construction is simple, operates at all times without need of adjustment, and operates equally well whether turned forward or backward.

Having thus described the invention what I claim and desire to secure by Letters Patent is;—

1. In a pepper holder and grinder, a hollow body, a grinding member fixed thereto, a rotatable cooperating grinding member, one member being within the other, the proximate surfaces of said members being cylindrical but each having stepped semi-cylindrical grooves, the grooves in the different members registering with each other successively.

2. In a pepper holder and grinder, a hollow body, a grinding member fixed thereto, a rotatable cooperating grinding member within the fixed member, the proximate surfaces of said members being cylindrical but each having stepped grooves, and having also teeth extending in lines parallel to the axial line.

3. In a pepper holder and grinder, a hollow body, fixed and rotatable grinding members cylindrical in outline, there being vertical grooves in the proximate surfaces of said grinding members adapted at the top of the grinding members to admit the pepper seeds to be ground, and longitudinally disposed V-shaped teeth on said proximate surfaces whereby the grinder grinds equally well when turned in either direction.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

LAURENT ELOI DEUDON.

Witnesses:

OCTAVE LABBÉ,

MARGUERITE A. SCHULTZ.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."