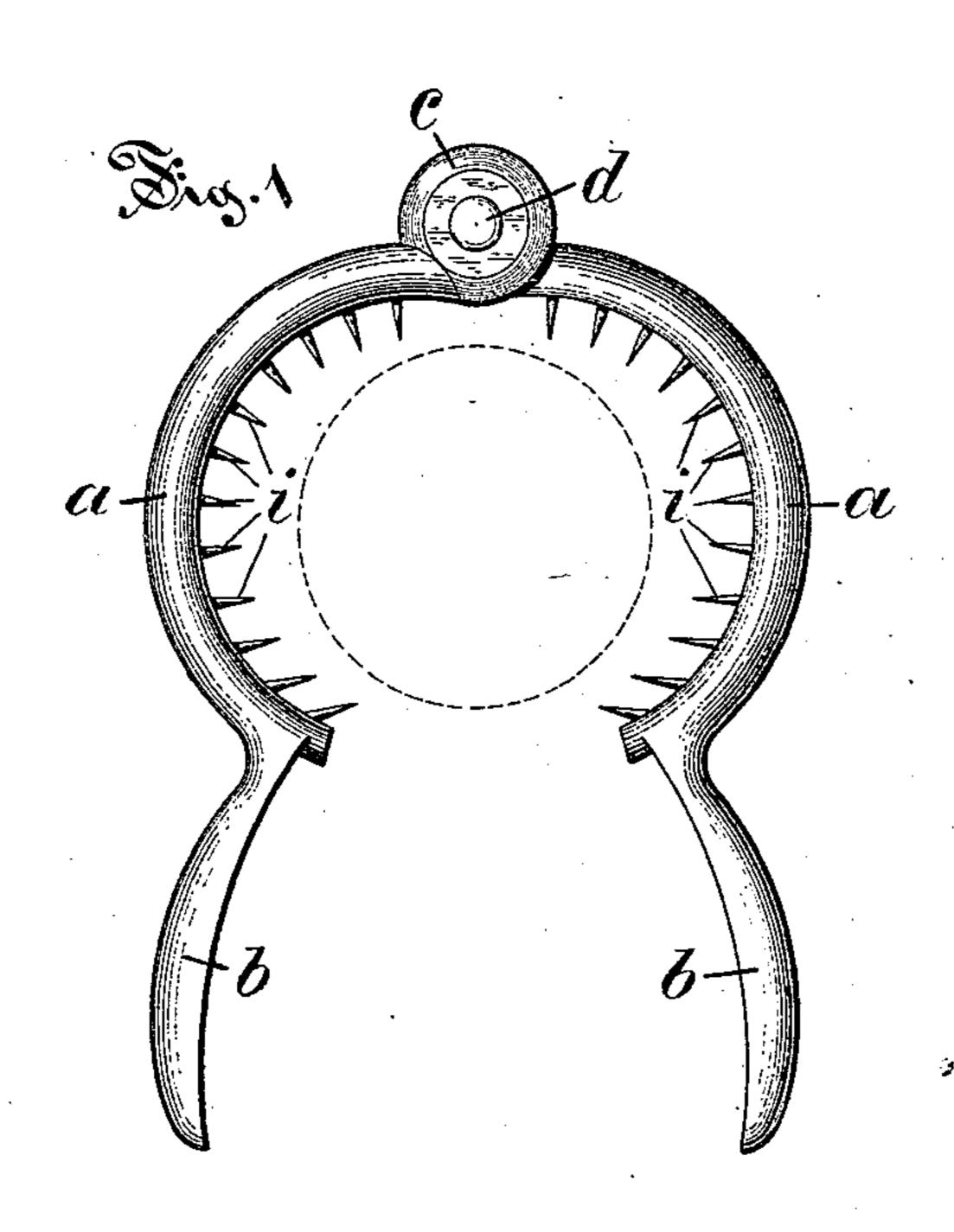
(No Model.)

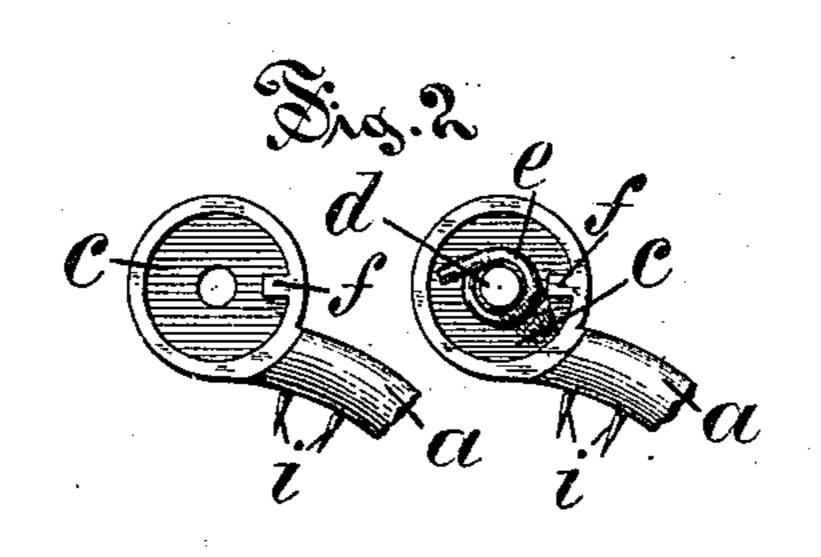
W. R. HARTIGAN.

EGG OPENER.

No. 355,316.

Patented Jan. 4, 1887.





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WILLIAM R. HARTIGAN, OF BURLINGTON, CONNECTICUT.

EGG-OPENER.

SPECIFICATION forming part of Letters Patent No. 355,316, dated January 4, 1887.

Application filed June 30, 1886. Serial No. 206,679. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. HARTI-GAN, of Burlington, in the county of Hartford and State of Connecticut, have invented 5 a certain new and useful Improvement in Egg-Openers, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is what may be called a "flatwise" to view of an egg-opener embodying my improvement. Fig. 2 is a detail view showing the in-

terior of the joint.

This improvement, as its title indicates, relates to an egg-opener, and is designed to 15 provide a device adapted to cut and remove from an egg any portion of its shell. The egg can meanwhile be held in any suitable cup or support, or it can be held in a person's hand. A patent has already been granted for 23 a device intended for the same general purpose—to wit, the patent to Daniel H. Murphy, No.212,394, dated February 18,1879—of which said patent, together with the exclusive rights and privileges granted thereby, I am the sole 25 owner. While the device described and claimed in said Letters Patent is of utility, it has at the same time certain defects in operation which are cured in the device forming the subject-matter of these present Letters Patent.

30 In the accompanying drawings, the letters a denote parti-circular jaws, hinged or pivoted together and provided with the handles b. The nature of the joint or pivot by which the jaws a are connected is illustrated in Fig. 2,

35 which jaws are provided with a cup, c, at the joint, the open faces of which fit together. Inside the cup, and around the pivot-pin d, is coiled the wire spring e, the ends of which bear against the lugs f, which are inside the 40 cups. This spring, in the relation already de-

scribed, tends to keep the jaws a apart or open | teeth, substantially as described, and for the to the desired extent, so that in using the device the user has simply to press the handles together, and they open again when released

45 from the action of the spring.

The distinct and peculiar feature of the pres-

ent improvement is a kind of teeth made use of, which are set projecting from the inner sides of the parti-circular jaws. These teeth iare spine-teeth, by which is meant slim sharp 50 spines separated from each other at the base and throughout by a definite interval, and of a length at least double the diameter of the base.

In using this device the egg is encircled at any desired point by the parti-circular jaws, 55 and then by pressing the handles together the spines are caused to enter, penetrate, and perforate the egg-shell, so that the egg-shell comes apart at this line of perforations with a clean and clear division. In the said former patent 60 of Murphy the parts corresponding to the present parti-circular jaws were described as "formed with either a plain or a serrated working-jaw," and in the drawings the jaw was shown serrated, being provided with teeth 65 resembling in general the teeth of a saw. As already pointed out hereinbefore, while this device of the said former patent has utility, there was a serious defect in its working as compared with the working of the present im- 70 provement. That defect was a crushing of the egg-shell along the line of separation into a great variety of fragments—a difficulty entirely avoided and cured by the use of the spine-teeth described herein. An egg-shell is 7: so peculiar and so brittle in its nature that it cannot be separated along a given line cleanly and nicely by any and every kind of cuttingedge. The use of the peculiar spine-teeth herein shown and described effects the desired 80 end perfectly.

I have shown and described this device as distinct and by itself. It is obvious that it may be combined with a cup or cups.

I claim as my improvement— The parti-circular jaws provided with spinepurpose set forth.

WILLIAM R. HARTIGAN.

Witnesses:

WM. E. SIMONDS, A. B. JENKINS.