(No Model.) 2 Sheets—Sheet 1.

# F. WIELAND.

## PESTLE AND SQUASHING APPARATUS.

No. 568,009. Patented Sept. 22, 1896.

Fig. I.

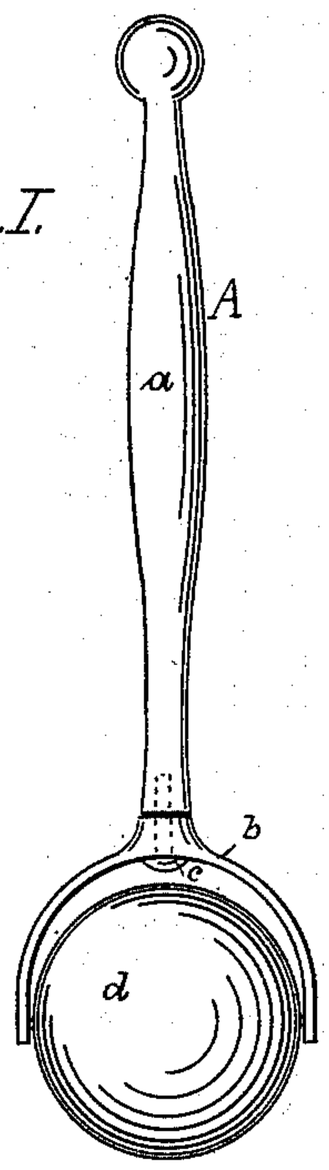



Fig. III.

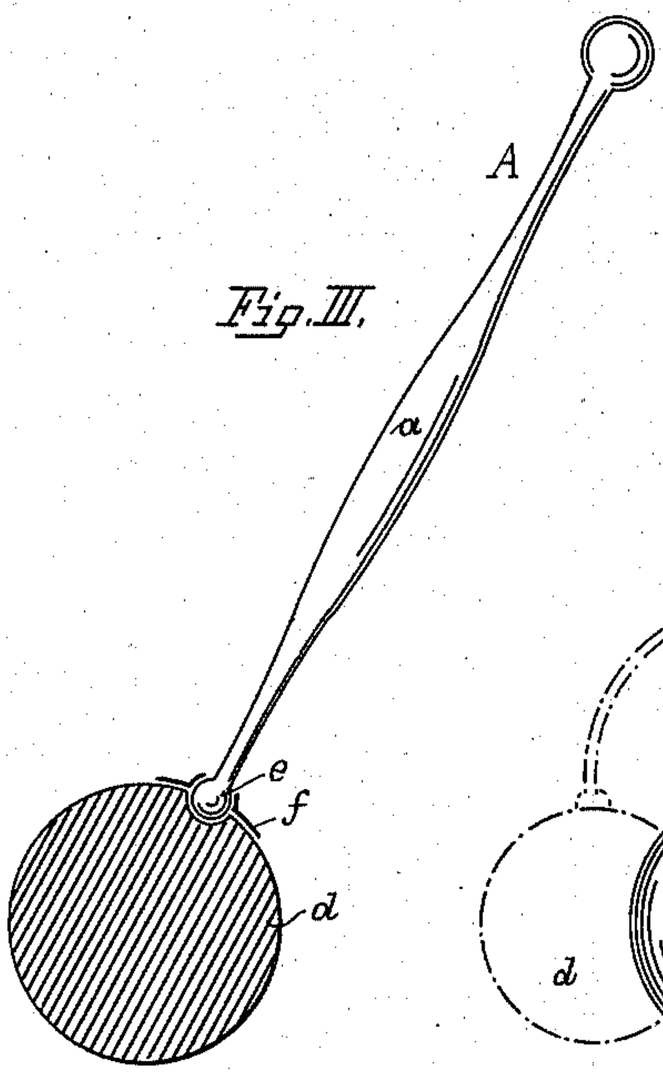



Fig. II.

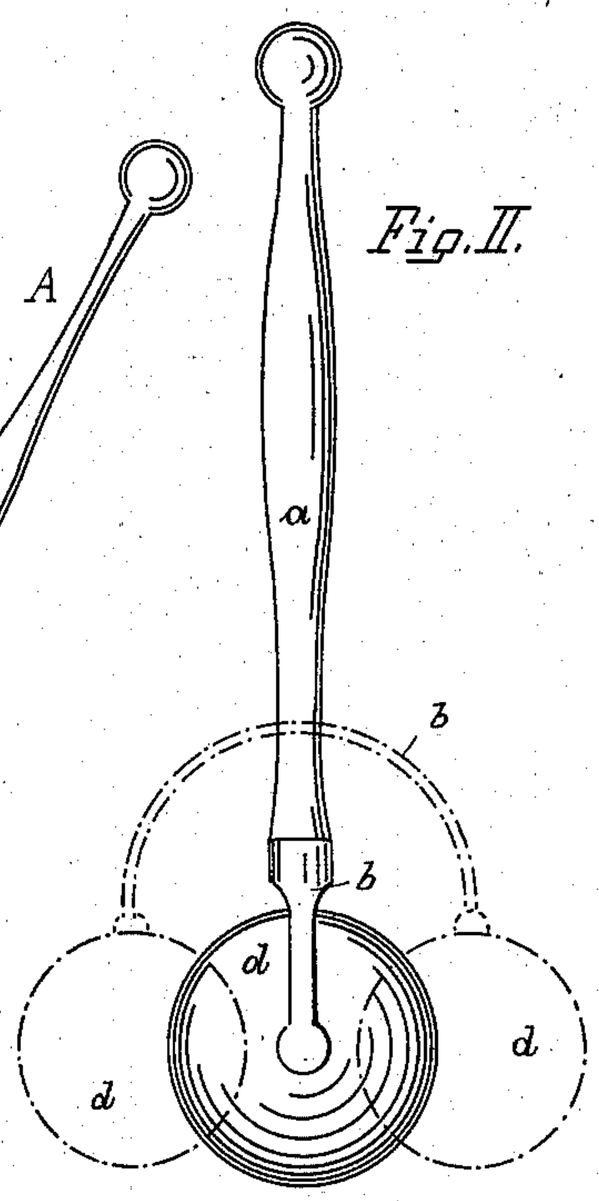
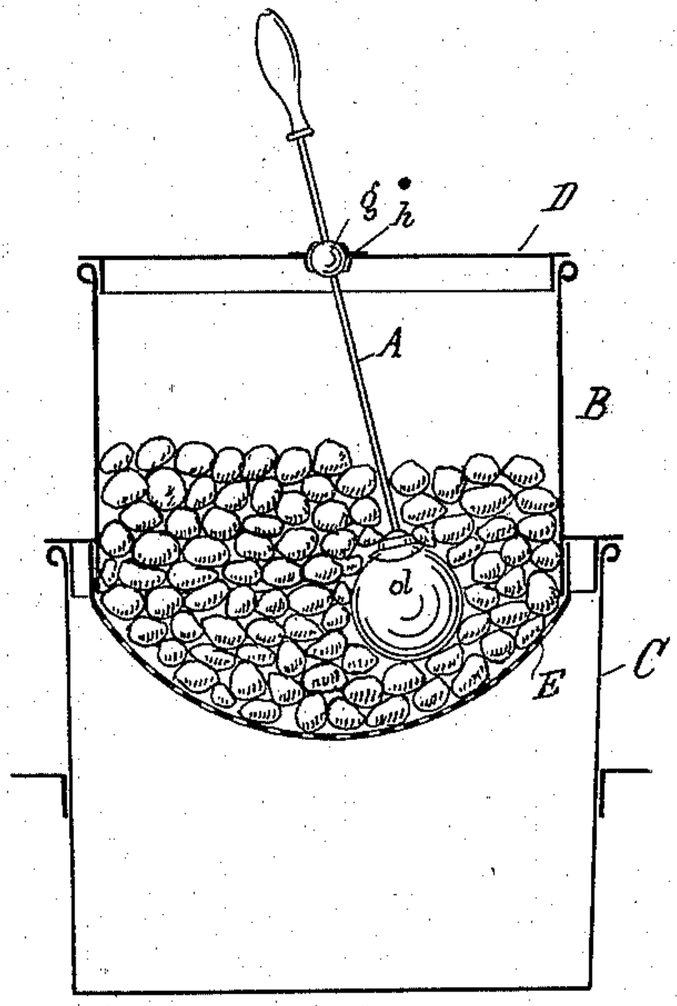



Fig. 4.




Witnesses
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(No Model.) 2 Sheets—Sheet 2.

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## PESTLE AND SQUASHING APPARATUS.

No. 568,009. Patented Sept. 22, 1896.

Fig. V.

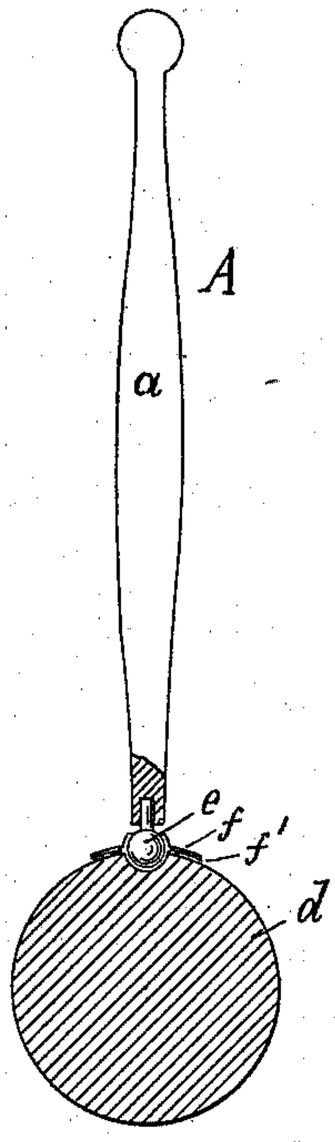



Fig. VII.

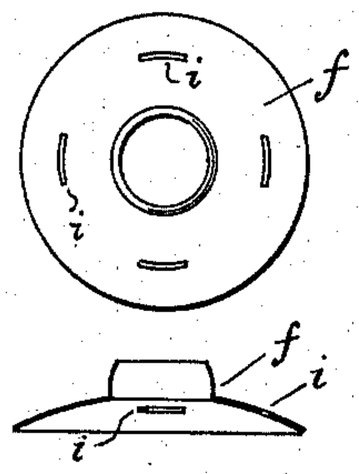



Fig. VIII.

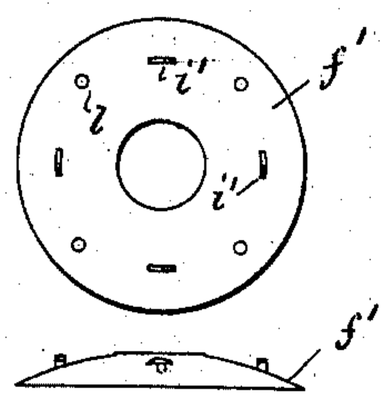



Fig. VI.

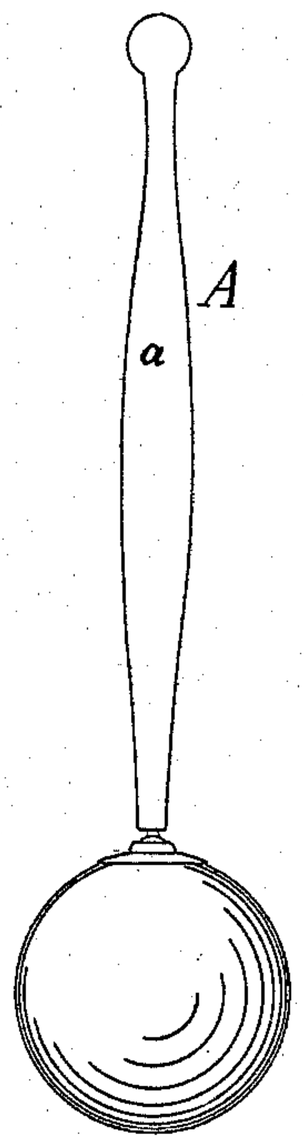



Fig. X.

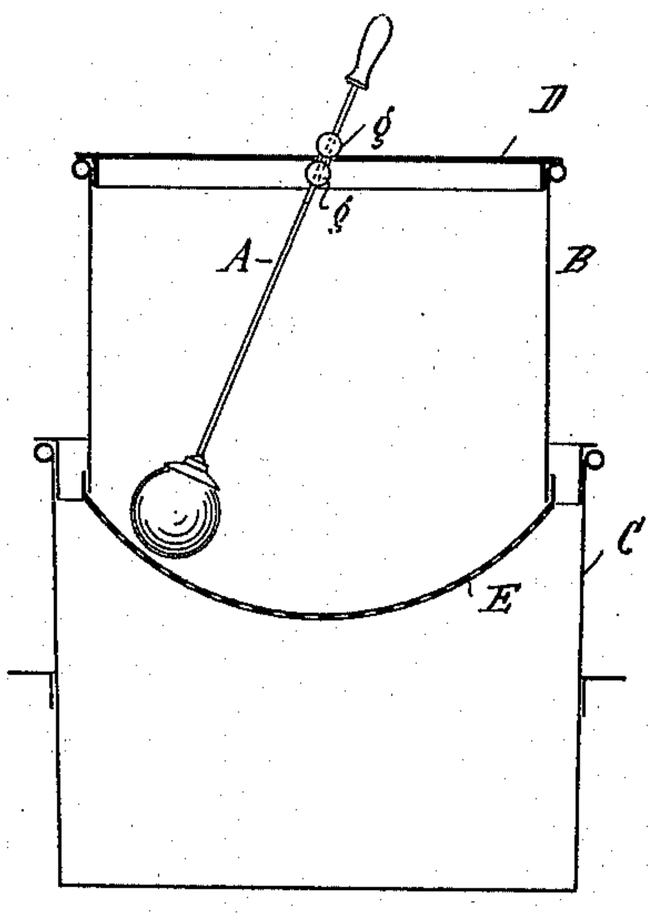
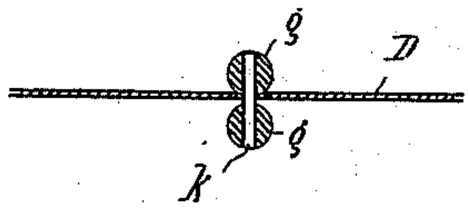



Fig. IX.




Witnesses

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# UNITED STATES PATENT OFFICE.

FRANZ WIELAND, OF BERLIN, GERMANY.

## PESTLE AND SQUASHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 568,009, dated September 22, 1896.

Application filed December 20, 1895. Serial No. 572,782. (No model.) Patented in Germany September 9, 1894, No. 82,418; in Austria October 12, 1894, No. 45/1,135; in France October 19, 1894, No. 242,225; in Belgium October 19, 1894, No. 112,318, and in Switzerland December 5, 1894, No. 9,579.

*To all whom it may concern:*

Be it known that I, FRANZ WIELAND, a subject of the King of Prussia, German Emperor, residing at Berlin, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Pestles and Squashing Apparatus, of which the following is a specification.

The invention has been patented in Germany September 9, 1894, No. 82,418; in Switzerland December 5, 1894, No. 9,579; in Belgium October 19, 1894, No. 112,318; in France October 19, 1894, No. 242,225, and in Austria October 12, 1894, No. 45/1,135.

The object of this invention is the construction of a pestle, either by itself or in combination with a squashing apparatus, which facilitates the squashing of soft plastic materials and the forcing them through a sieve, distinguished from the usual pestle by having its lower ball-shaped end united with the handle by means of a socket-joint. In consequence of this joint connection the ball has its own separate motion, feeding continually fresh material.

In the drawings, Figures 1, 2, and 3 show different combinations between ball and handle, while Figs. 5 to 8 show the construction of the socket-joint which connects the ball with the handle. Figs. 4 and 10 represent the combination of the improved pestle with a squashing apparatus and the pivoting of the pestle in two different constructions. Fig. 9 is a detail of Fig. 10.

The improved pestle consists of the handle *a* and the ball *d*, the latter being connected to the former by means of a joint, allowing the ball an independent motion from the motion of the handle. The joint connection of ball *d* with handle *a* may consist of a sleeve *b*, Figs. 1 and 2, connected with the handle *a* by means of the pin *c* or of a socket-joint *e f*, Figs. 3, 5, and 6. There may be also a combination of socket-joint and sleeve, as shown in dotted lines, Fig. 2, in such a manner that the sleeve does not encompass the ball, but is fitted at each end with a socket-joint, which is connected with the balls. The sleeve *b* may in this case be rigidly united with the handle, Fig. 5, or pivoted by means of pin *c*, Fig. 1.

In operation the pestle is either pressed in the usual manner against the material (such as boiled potatoes) in the basin B, forcing it through the perforated bottom E, or the basin B may be in combination with a steaming vessel C, Fig. 4. The bottom of basin B is a concave sieve E, which enters the top part of the boiling-pot C, which latter contains water and is put on the fire. Into the cover D of basin B is cut a central hole, into which opening the handle of the pestle is introduced, either direct or in combination with ball *g*, Fig. 4, through which the handle of the pestle passes. The ball *g* is held in its place on the cover by bearing-plate *h*.

By using the socket-joint for the connection of ball *d* and handle *a* the disjointing of the two parts is easily effected, which is of importance for the purpose of cleaning the pestle.

Figs. 5 to 8 illustrate the construction of the socket-joint. The socket-joint consists of a ball *e*, inserted into the lower end of the handle *a*, moving in the bearing-plate *f'*, fixed to the squashing-ball *d*, Fig. 5, by means of screws *l*, Fig. 8. The plate *f'* has in its center a concave recess for the reception of ball *e* and is fitted with projections or lugs *i'*, entering slots *i* in the top plate *f*, which encircles the upper half of ball *e*. The lugs *i'* have at their top ends hooks or buttons. If the two plates *f* and *f'* are united, the lugs *i'* enter into the slots *i*. The top plate is then turned a short distance, the hooks grasp the plate, and the connection is completed. The connection may also be made in such a manner that the hook or button headed lugs *i'* are pivoted to the plate *f'*, and by making the connection the plates are brought in such a position that the lugs *i'* enter the slots *i*, projecting with their heads over the top plate *f*. The lugs are now turned, so that the hook-shaped heads stand in a right angle to the slot, and the connection is completed. It is evident that the taking apart of ball and

handle for the sake of cleaning is, according to this construction, a matter of ease and convenience.

Figs. 9 and 10 show a modification of the connection of the pestle with the cover of basin B by means of two balls *g g*, connected with each other by a tube *k*, through which tube the helve of the pestle (which is in this case round, suiting the size of the tube) is passed and the handle screwed on the top. The cover, with a hole in its center, is placed between the two balls, giving the pestle free play for moving in any direction, while the tube *k* permits the lowering and raising of the pestle.

I claim—

1. In combination, a pestle comprising a stem and a lower spherical part or ball and a swiveled connection uniting the stem and ball, substantially as described.

2. In combination, a pestle comprising a stem and a lower spherical part or ball, a ball on the end of the stem fitting a socket in the spherical part and means for securing the stem and sphere together, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FRANZ WIELAND.

Witnesses:
W. HAUPT,
E. ZINNS.