

No. 790,192.

PATENTED MAY 16, 1905.

J. F. CURTIS.
BOTTLE DISK EXTRACTOR AND HOLDER.
APPLICATION FILED JULY 5, 1904.

Fig. 1.

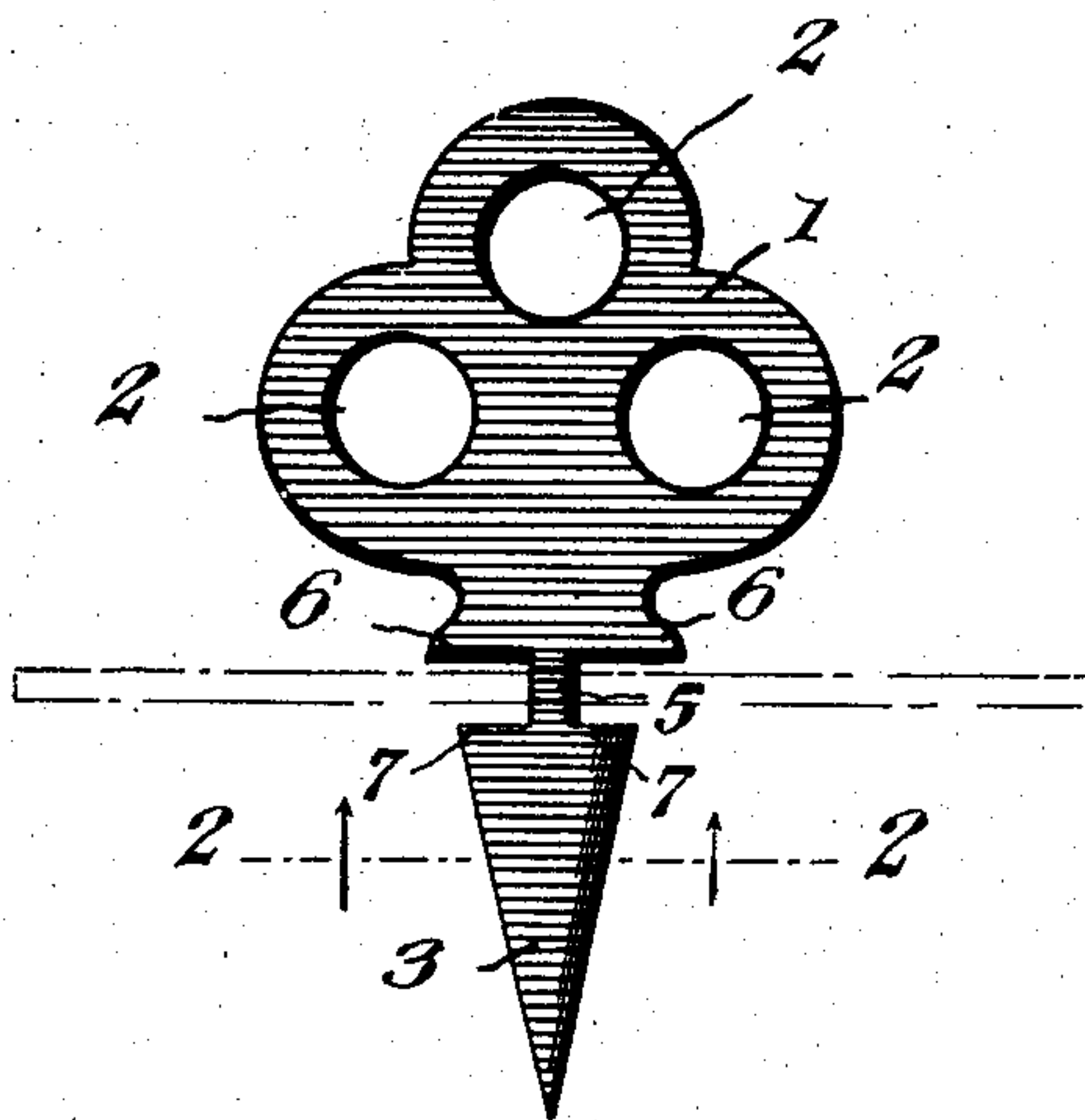
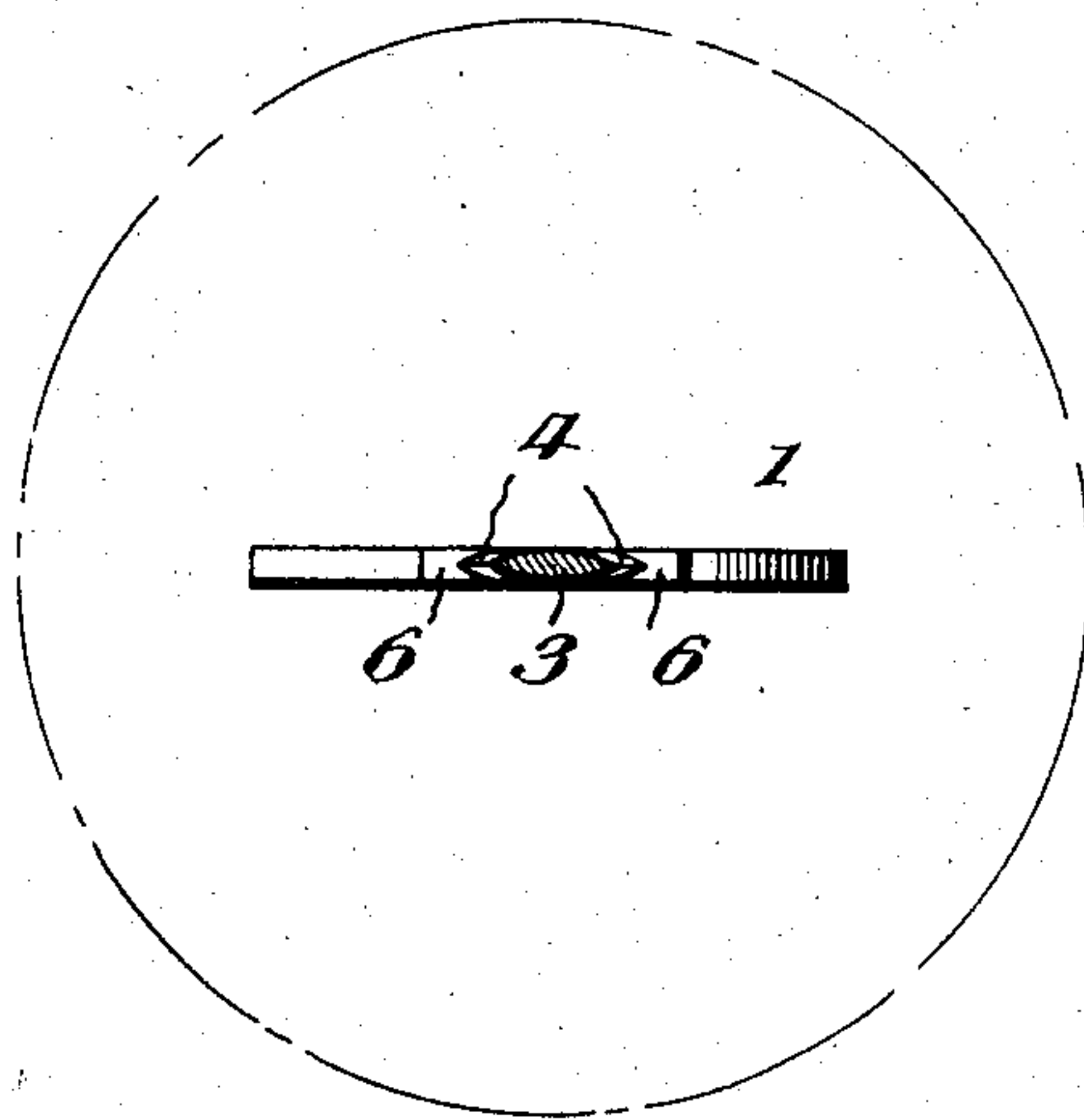


Fig. 2.



WITNESSES:

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BOTTLE-DISK EXTRACTOR AND HOLDER.

SPECIFICATION forming part of Letters Patent No. 790,192, dated May 16, 1905.

Application filed July 5, 1904. Serial No. 215,443.

To all whom it may concern:

Be it known that I, JOHN F. CURTIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Bottle-Disk Extractors and Holders, of which the following is a specification.

This invention relates to an improved bottle-disk extractor and holder.

In withdrawing the paper disks which are commonly employed as stoppers for milk-bottles it is customary to use a fork, with one of the prongs of which the disk is penetrated. The disadvantage of this operation is that the paper disk almost invariably is mutilated to such an extent that it cannot be replaced upon the bottle in the event that the entire contents thereof be not consumed when the disk is first withdrawn. It is well known that if a milk-bottle from which the cover has been removed be placed in a refrigerator containing melons and other articles the nature of which renders them incompatible with milk or cream the contents of the milk-bottle will be caused to become unfit for use.

In order to overcome the disadvantages which have been set forth, it is the principal object of the present invention to extract and hold the milk-bottle disk in such manner that it will not be mutilated, and therefore will be in condition to be replaced easily and quickly upon the milk-bottle in order to prevent the contents thereof from being contaminated by the influence of the atmosphere.

A further object of the invention is to attain the object first recited by means of a device which shall be strong, simple, and inexpensive in construction, as well as thoroughly efficient in operation.

With the foregoing and other minor objects in view, which will appear as the description proceeds, the invention resides in the novel form of key for extracting and holding milk-bottle disks hereinafter described and claimed as a practical embodiment of the invention.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a key constructed in accordance with the invention. Fig. 2 is a section on the line 2 2 looking from below.

Like reference-numerals indicate corresponding parts on the two figures.

The improved key of this invention preferably is stamped in a single piece from sheet metal, although, if desired, the device may be formed in any other suitable manner.

The reference-numeral 1 indicates the handle of the improved key, which is formed with perforations 2, the upper one of which may be used to suspend the key from a nail and the others to lessen its weight and to decrease the amount of material necessary in its construction. The key is formed with a penetrating portion 3, which lies in the same plane of flatness with the handle and is wedge-shaped, as shown, the opposite edges thereof being beveled, as shown at 4, in order that the penetrating portion may be passed readily through a paper disk, such as is indicated by the dotted lines in the drawings. The penetrating portion 3 is connected with the handle 2 by a tongue 5, the width of which is slightly greater than the thickness of the penetrating portion 3, for a purpose presently to be made clear. Shoulders 6 6 are formed upon the lower portion of the handle 1, similar shoulders 7 7 being formed upon the upper end of the penetrating portion 3. The shoulders of the handle and the shoulders of the penetrating portion are parallel with each other and are separated by a distance slightly greater than the thickness of a milk-bottle disk.

In using the improved key the penetrating portion is forced through the milk-bottle disk until the shoulders thereof are disposed below the lower surface of said disk and the shoulders of the handle are disposed above the upper surface of said disk. The handle is then given a quarter-turn, which causes the wedge-shaped penetrating portion to lie at a right angle with respect to the slot which its insertion caused to be made in the paper disk. By reason of the fact that the tongue 5, which connects the penetrating portion with the handle, is slightly greater in width than the thickness of the penetrating portion the opposite edges of said tongue will be caused to bite against the opposite sides of the slot which has been formed in the paper disk, thus preventing the key from working around into

such position as would permit the withdrawal of the penetrating portion through the slot which it formed when first inserted into the disk. It will be observed, furthermore, that
5 by reason of the fact that the shoulders 6 6 on the handle and the shoulders 7 7 on the penetrating portion are parallel with each other and are separated by a distance slightly greater than the thickness of the paper disk
10 said disk will be held securely between said shoulders and will be prevented from wobbling or losing its engagement with the improved key. After the disk has been removed from the milk-bottle by means of the
15 key it is permitted to remain upon said key, for which reason it can be replaced upon and withdrawn from the milk-bottle as many times as may be necessary until the contents thereof shall be entirely consumed.
20 By reason of the fact that the improved key of this invention is adapted to be stamped from a single piece of sheet metal it is simple, inexpensive, strong, and durable in construction and a large number of keys can be packed
25 in a small space for purposes of transportation. The key is thoroughly effective in op-

eration, and by permitting the paper disk to be repeatedly removed and replaced it prevents the contents of the bottle from spoiling.

Having thus fully described the invention, 30 what is claimed as new is—

As a new article of manufacture, a milk-bottle-disk extractor stamped from sheet metal and comprising a flat handle having shoulders thereon, a flat wedge-shaped penetrating portion 35 having beveled edges and shoulders, said penetrating portion lying in the same plane of flatness with the handle, and a flat tongue connecting the handle and penetrating portion, the width of the tongue being slightly 40 greater than the thickness of the penetrating portion, for the purpose specified, and the shoulder of the handle and penetrating portion being parallel with each other and separated by a distance slightly greater than the 45 thickness of a milk-bottle disk.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN F. CURTIS.

Witnesses:

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