No. 880,564. PATENTED MAR. 3, 1908.

O. H. NESSETH.

HOLDER FOR USE IN CLEANING CREAM SEPARATOR DISKS.

APPLICATION FILED JULY 15, 1907.

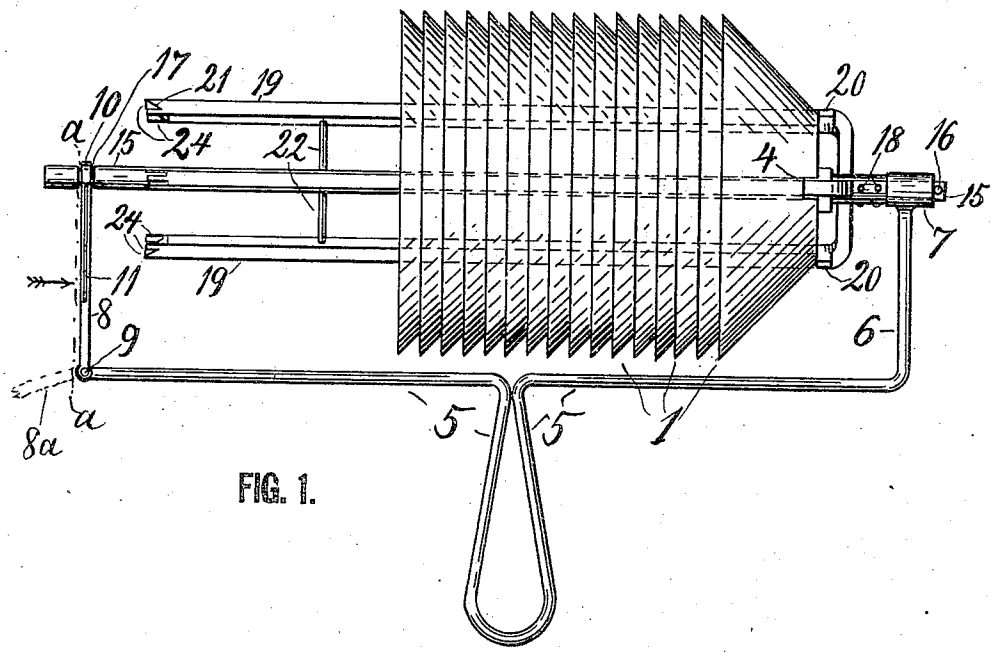


FIG. 1.

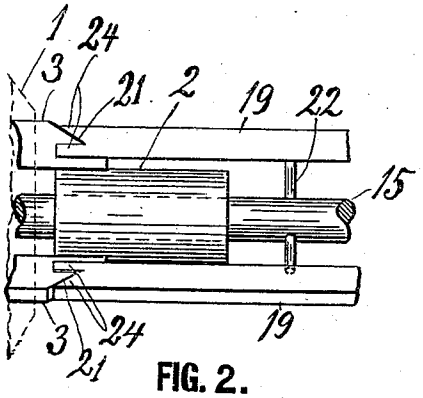


FIG. 2.

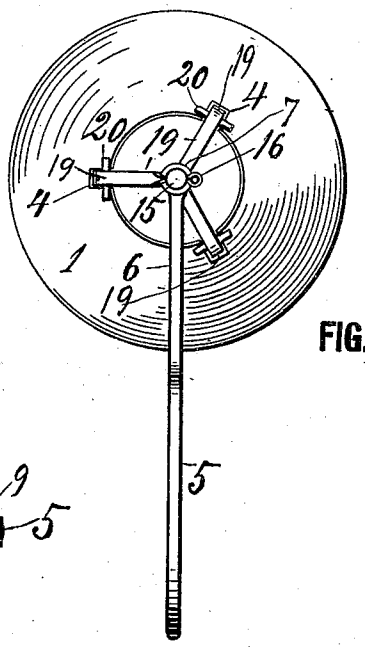


FIG. 3.

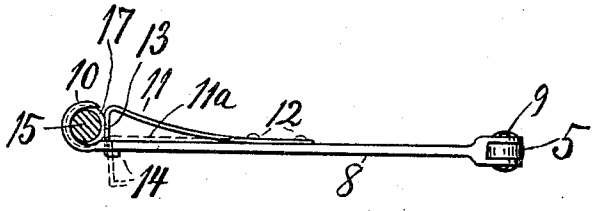


FIG. 4.

WITNESSES:

D. E. Carlsen.

L. E. Carlsen.

INVENTOR:

Ole H. Nesseth.

BY HIS ATTORNEY:

A. M. Carlsen.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

OLE H. NESSETH, OF BADGER, MINNESOTA.

HOLDER FOR USE IN CLEANING CREAM-SEPARATOR DISKS.

No. 880,564. Specification of Letters Patent. Patented March 3, 1908.

Application filed July 15, 1907. Serial No. 383,822.

To all whom it may concern:

Be it known that I, OLE H. NESSETH, citizen of the United States, residing at Badger, in the county of Roseau and State of Minnesota, have invented a new and useful Holder for Use in Cleaning Cream-Separator Disks, of which the following is a specification.

My invention relates to holders for use in cleaning cream separator disks; and the object is to provide an improved efficient and convenient device of said kind. This and other objects I attain by the novel construction and arrangement of parts illustrated in the accompanying drawing, in which—

Figure 1 is a side view of the device with a number of disks thereon. Fig. 2 is a portion of Fig. 1 shown in position for receiving the disks from or delivering them to the so called "hollow tube" of the separator. Fig. 3 is Fig. 1 seen from the right hand end. Fig. 4 is an enlarged partly sectional view on the line *a*—*a* of Fig. 1.

Referring to the drawings by reference numerals, 1 designates a set of disks of the well known construction used in centrifugal cream separators, where they are rotated by a "hollow tube", of which the top portion 2—3 is shown in Fig. 2, the ribs 3 engaging the notches 4 of the disks, which arrangement needs no further explanation as the same is well known in such cream separators; the dotted line 1 in Fig. 2 indicates the uppermost disk of a pile or set arranged on the ribs or bars 3, much the same as on the device in Fig. 1, on which the disks are held while being cleaned by rinsing in hot water.

The device or holder consists of a handle 5 having an angularly bent arm 6 with a journal 7 and another arm 8 pivoted at 9 and provided with an opensided journal 10 (best shown in Fig. 4) having its open side normally closed by a spring catch 11 secured to the arm at 12 and having a short arm 13 sliding in a hole in the arm and retained therein by a hook 14. In said journals revolve the ends of a shaft 15, which is permanently retained in the journal 7, by a pin 16, while its other end is provided with an annular groove 17 engaging the journal 10 when the joint 9 assumes a substantially rectangular position.

Near one end of the shaft 15 are fixed at 18 three bars 19 extending parallel to the shaft and having lugs 20 for the disks to stop against and their free ends provided with notches 21 adapted to fit over the beveled ends of the ribs 3 of the tube of the cream separator, as shown in Fig. 2 so that the arms 19 cannot slip laterally away from said ribs while the disks are being moved in one or more lots from the tube 2—3 on to the bars 19, or in the opposite direction.

22 are supporting braces between the shaft 15 and the bars 19 to hold the latter more firmly.

When the disks are to be removed from or placed onto the spindle 15—19 the spring catch 11 is first depressed to the position 11^a in Fig. 4, the shaft sprung out of the journal 10 and the arm 8 swung outward as in dotted lines 8^a in Fig. 1, to let the disks pass over the end of the spindle, the arm 8 is then restored to normal position on the shaft by simply pressing it against the catch 11 and into the journal 10.

Among other advantages of the construction set forth are, first, that the bars 19 cannot slip on the ribs 3 as they are each formed at three sides of the notch 21 with fingers 24 bearing against three sides of the rib 3, while the braces 22 will prevent spreading of the bars; second, the shaft 15 and bars 19 being fixed together and the shaft being permanently journaled at 7, the entire device is easily handled with one hand, while in earlier constructed similar devices several separable parts are involved and give much bother in the use of the device; third, the pivoted arm 8 and catch 11 obviates the springing of either the shaft or the arms of the handle in removing and replacing the disks.

Having thus described my invention, what I claim is:—

1. In a device of the kind described, a handle, two arms extending therefrom and having in their ends, one an open-sided journal with a spring catch normally closing the opening thereof, the other arm having a common journal, a shaft permanently retained with one end in the common journal and the other end detachably resting in the open-sided journal, bars fixed on the shaft and extending parallel thereto and adapted to hold and engage the inner notches in disks of cream separators, for the purpose set forth.

2. In a device of the kind described, a handle, two arms extending therefrom and having in their ends, one an open-sided journal with a spring catch normally closing the opening thereof, the other arm having a common journal, a shaft permanently retained with one end in the common journal and the other end detachably resting in the open-

sided journal, bars fixed on the shaft and extending parallel thereto and adapted to hold and engage the inner notches in disks of cream separators, for the purpose set forth; said arm with the opensided journal having a joint to enable a portion of it to be swung out of the way for the disks as they enter and leave the device.

3. In a device of the kind described, a handle, two arms extending therefrom and having in their ends, one an open-sided journal with a spring catch normally closing the opening thereof, the other arm having a common journal, a shaft permanently retained with one end in the common journal and the other end detachably resting in the opensided journal, bars fixed on the shaft and extending parallel thereto and adapted to hold and engage the inner notches in disks of cream separators, for the purpose set forth; said arm with the opensided journal having a joint to enable a portion of it to be swung out of the way for the disks as they enter and leave the device, and said shaft having an annular recess for the open-sided journal to help hold it in place on the shaft.

4. In a device of the kind described, a handle, two arms extending therefrom and having in their ends journals, a shaft normally retained in the journals, bars fixed on the shaft and extending parallel thereto and adapted to hold and engage the inner notches in disks of cream separators, for the purpose set forth, said bars having their ends formed each with three fingers adapted to guide upon three sides of each bar or rib of the disk-carrying tube of the separator.

5. In a device of the kind described, a handle, two arms extending therefrom and having in their ends journals, a shaft normally retained in the journals, bars fixed on the shaft and extending parallel thereto and adapted to hold and engage the inner notches in disks of cream separators, for the purpose set forth, said bars having their ends formed each with three fingers adapted to guide upon three sides of each bar or rib of the disk-carrying tube of the separator, and radial braces between the shaft and said bars to prevent their spreading or closing beyond normal position.

6. In a device of the kind described, a handle, two arms extending therefrom and having in their ends journals, a shaft normally retained in the journals, bars fixed on the shaft and extending parallel thereto and adapted to hold and engage the inner notches in disks of cream separators, for the purpose set forth, said bars having the lugs 20 to resist the disk adjacent thereto.

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

OLE H. NESSETH.

Witnesses:

T. P. ANDERSON,

J. A. BURKEE.