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Patented Aug. 13, 1901.

I. L. SHERK.  
CLEANER FOR BOLTING SIEVES.

(Application filed May 28, 1900.)

(No Model.)

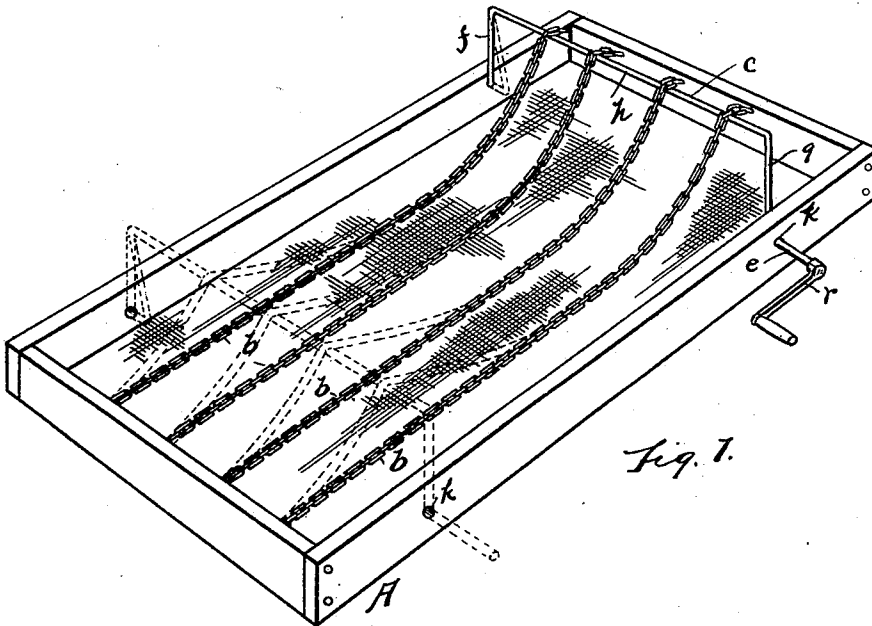


Fig. 1.

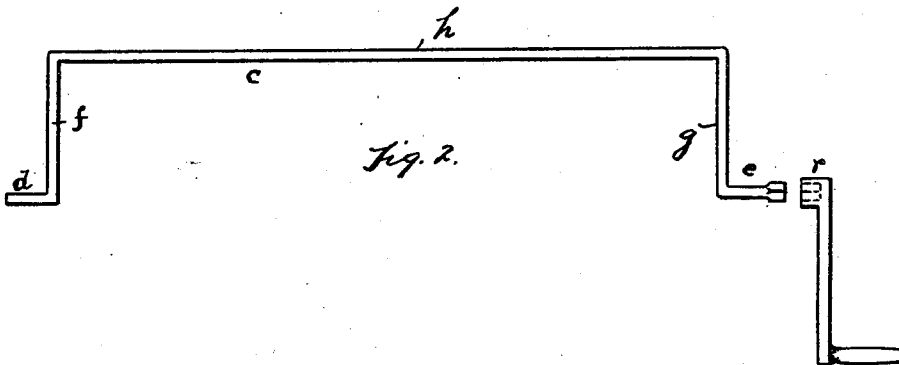


Fig. 2.

WITNESSES

*Chas. E. Wisner.*

*May E. Kott.*

INVENTOR,

*Isaac L. Sherk*

By

*Parker & Burton*

Attorneys.

# UNITED STATES PATENT OFFICE.

ISAAC L. SHERK, OF ANN ARBOR, MICHIGAN.

## CLEANER FOR BOLTING-SIEVES.

SPECIFICATION forming part of Letters Patent No. 680,466, dated August 13, 1901.

Application filed May 28, 1900. Serial No. 18,191. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC L. SHERK, a citizen of the United States, residing at Ann Arbor, county of Washtenaw, State of Michigan, have invented a certain new and useful Improvement in Cleaners for Bolting-Sieves; and I 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, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to cleaners for bolting-sieves, and has for its object a device intended to regulate the action of chain or similar flexible cleaners employed to scrape, brush, or beat the surface of a bolting-screen in order to aid in the screening of material therethrough.

One of the means for cleaning bolting-screens in quite common use consists of a loose chain or similar heavy flexible article that lies on the top of the bolting-cloth, held at its ends to prevent displacement from the bolting-cloth or to prevent it gathering in any one place thereon, but having sufficient slack to enable it to be moved over a considerable portion of the surface of the cloth. A chain is the most approved form of flexible article, and this sweeps over the surface of the cloth under the vibratory action of the screen and its own inertia and serves to keep the cloth in condition to perform its duty as a sieve. In practice it is found that there is more need to treat the cloth at the head end of the sieve than at the tail end of the sieve, and it is also found that the cloth requires to be treated differently with different conditions of atmosphere, meal, and temperature. For example, the treatment on a hot dry day would be different from the treatment of the sieve on a hot damp day, and the treatment of the sieve on a cold day would be still different, and so also the treatment of a meal that is somewhat damp or heavy would be different from the treatment when acting on the meal of a drier character, and my invention is intended to permit of the ready adjustment of the chain or flexible scraper to suit these different conditions.

In the drawings, Figure 1 is a perspective of a bolting-sieve with the chains attached

and with my adjusting attachment connected therewith. Fig. 2 is an elevation of the adjusting attachment.

A indicates the bolting-sieve, to which there are attached a number of chains *b b b*, and these chains are attached by their ends or at their ends to the ends of the sieve, and each chain is long enough to allow a considerable portion of its length to lie loosely on the surface of the cloth.

To the end of the frame of the sieve A is attached a bail-like cross-bar *c*. Preferably this is made of a rod of metal bent to the form of a double crank or U-crank having two journal-bearings *d* and *e*, two arms *f* and *g*, and the cross-bar *h*. The journals *d* and *e* are engaged in bearings *k* in the side bars of the frame of sieve A, and the entire attachment can be turned in its bearings to assume any desired angle to the body of the sieve. The attachment is made, preferably, in the shape described in order that it may be placed either in the head or tail of the machine or transferred from one to the other at will, and one of the bearings *e* is arranged to engage with a sleeve-coupling crank *r*, by means of which it may be turned in its bearings from the outside of the frame in which the sieves are inclosed. The length of the arms *f* is sufficient so that when the attachment is in one position the chains are lifted entirely off from the cloth, and as the attachment is turned in its bearings any desired amount of chain may be dropped onto the cloth until the chain is practically in engagement with the cloth from end to end of it.

Generally, the attachment is placed at the tail end of the sieve, leaving the chains in contact from the head end and extending toward the tail end, according to the position given to the attachment; but under certain conditions it may be desirable to place the attachment at the head end, and it is easily shifted from one position to the other by bending the arms *f g*, or one of them, inward, as shown in dotted lines in Fig. 1, or two attachments may be placed on the same sieve, if desired.

What I claim is—

1. In combination with a bolting-sieve, a flexible scraper attached at its ends to the sieve-frame and adapted to rest upon the

screen-surface of the sieve, a crank removably journaled in the sieve-frame and extending under said scraper, and means for turning said crank to different angular positions, 5 whereby a variable portion of the scraper is lifted from the screen-surface, substantially as described and for the purpose set forth.

2. In combination with a bolting-sieve, a flexible scraper attached at its ends to the 10 sieve-frame and adapted to rest upon the screen-surface of the sieve, a crank journaled in the sieve-frame and extending under said scraper and means for turning said crank to different angular positions, whereby a variable 15 portion of the scraper is lifted from the screen-surface, substantially as described and for the purpose set forth.

3. In combination with a bolting-sieve, a flexible scraper secured at its ends to the 20 screen-frame and adapted to rest by its weight upon the screen of said sieve, a double crank bearing at opposite sides of said sieve and extending under said scraper, said crank being

adapted to be inserted or removed from its bearings by bending a radial portion inward, 25 substantially as described.

4. In combination with a bolting-sieve, a flexible scraper secured at its ends to the screen-frame and adapted to rest by its weight upon the screen of said sieve, a double crank 30 bearing at opposite sides of said sieve and extending under said scraper, said crank being provided with a coupling end, and being adapted to be inserted or removed from its bearing by bending a radial portion inward, 35 and means for turning said crank adapted to engage with the coupling end from the outside, substantially as and for the purpose described.

In testimony whereof I sign this specification in the presence of two witnesses. 40

ISAAC L. SHERK.

Witnesses:

CHARLES F. BURTON,  
JOHN N. GOODRICH.