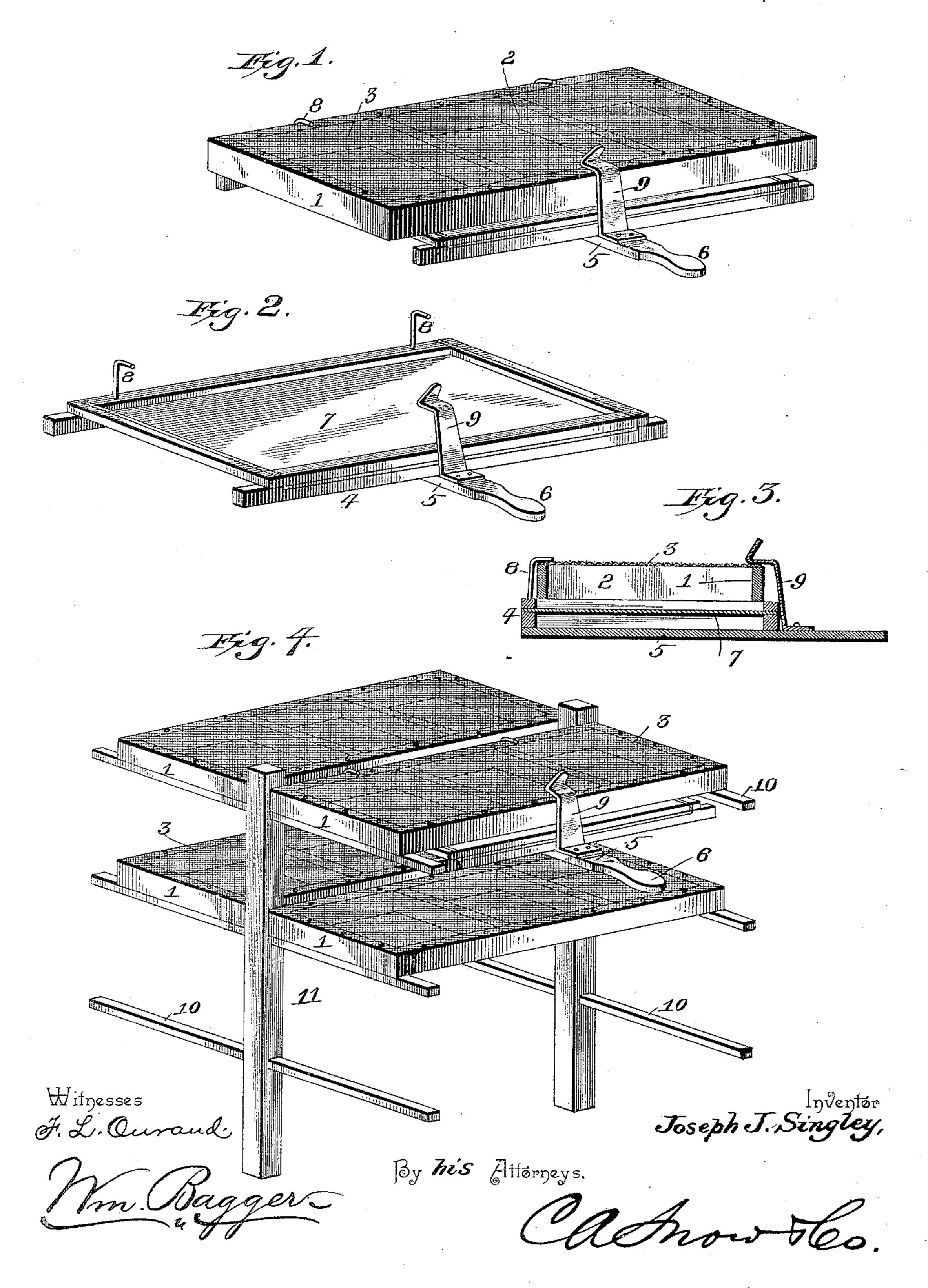
(No Model.)

## J. J. SINGLEY. SHELF FOR SUPPORTING CHEESE.

No. 442,148.

Patented Dec. 9, 1890.



## UNITED STATES PATENT OFFICE.

JOSEPH J. SINGLEY, OF EL DORADO, KANSAS.

## SHELF FOR SUPPORTING CHEESE.

SPECIFICATION forming part of Letters Patent No. 412,148, dated December 9, 1890.

Application filed April 23, 1890. Serial No. 349,111. (No model.)

To all whom it may concern:

Be it known that I, Joseph J. Singley, a citizen of the United States, residing at El Dorado, in the county of Butler and State of 5 Kansas, have invented a new and useful Shelf for Supporting Cheese, of which the following is a specification.

This invention relates to shelves for supporting cheese during the process of curing 10 and ripening the same; and it has for its object to construct a shelf which shall admit of the more thorough ventilation of the cheese than the solid shelves now customarily employed.

With this end in view my invention con-15 sists, primarily, of a screen forming the sup-

porting-shelf.

The invention further consists in the combination, with such screen, of a pan connected detachably with and arranged under-20 neath the same, so as to catch the dust resulting from the ripening process, thus enabling the dust and dirt to be conveniently removed and the shelf to be kept in a clean and pure condition.

The invention further consists in the construction and arrangement of details, which will be hereinafter fully described, and par-

ticularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is 30 a perspective view of one of my improved shelves with the dust-pan attached thereto. Fig. 2 is a perspective view of the dust-pan detached. Fig. 3 is a transverse sectional view of the shelf and dust-pan. Fig. 4 is a 35 perspective view of a rack supporting a number of my improved shelves.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a suitably-constructed rectan-40 gular frame, which may be made of wood, and which is provided with transverse braces 22, arranged at suitable distances apart. The upper side of said frame is covered with a screen 3 of wire-netting, which constitutes my im-45 proved supporting-shelf. The screen may be secured to the frame by means of nails or staples or in any other convenient manner.

4 designates a rectangular frame, which is provided with a transverse brace 5, which is 50 extended forwardly so as to form a handle 6. The frame 4 is provided with a covering 7, 1

which may be of cloth or of any other suitable material, such as sheet metal. The rear cross-bar of the frame 4 is provided with upwardly-extending hooks 8, which are adapted 55 to catch over the rear cross-bar of the shelfframe. The brace 5 of the frame 4 has an upwardly-extending spring-catch 9, which is adapted to catch over the front cross-bar of the shelf-frame.

In operation any desired number of the shelf-frames may be arranged upon the crossbars 10 of a suitably-constructed rack 11. The dust-pans consisting of the frames 4 may be arranged under each of the shelves, or they 65 may be in practice transferred from one shelf to another, as occasion may require. The cheese is supported upon the shelves directly above the dust-pans, and the latter will catch any dust and impurities that may drop 70 from the cheese. After the cheese are removed from the shelves, the latter may be readily cleaned by simply brushing them with a dry brush, when all remaining impurities will be caused to drop into the dust-pans, 75 which may afterward be readily removed and emptied.

Heretofore solid wooden shelves have been universally used for supporting cheese during the process of curing and ripening. Such 80 shelves have been objectionable for many reasons, principally on account of the large quantities of dust which will accumulate thereon, and which is not readily removed except by washing the shelves, which is unde- 85 sirable, for the very obvious reason that dampness is apt to affect the cheese injuriously. Again, such wooden shelves are apt to become permeated or soaked with moisture from the cheese supported thereon. Consequently 90 when one cheese is taken away and another put in its place the new cheese is liable to become injured or tainted. By my invention these objections are effectually overcome, and I am enabled to cure the cheese more rapidly 95 and in a more satisfactory manner than heretofore.

Having thus described my invention, what I claim, and desire to secure, is—

1. The combination, with a reticulated 100 shelf, of a dust-pan consisting of a frame suitably covered and provided at one side with

upwardly-extending hooks and at the other side with an upwardly-extending spring-

catch, substantially as set forth.

2. The combination, with a reticulated 5 cheese-shelf, of a dust-pan adapted to be connected detachably to and suspended below said shelf, and having a forwardly-extending handle whereby the parts may be lifted, substantially as set forth.

3. The combination of a reticulated cheeseshelf and a dust-pan consisting of a frame having a transverse brace extended forwardly to form a handle, said frame being covered with cloth or other suitable material and pro-15 vided with means for connecting it detachably

to the under side of the reticulated shelf, substantially as set forth.

4. The cheese-supporting shelf consisting of a frame having transverse braces and provided with a screen of wire-netting secured 20 to its upper side, in combination with a dustpan secured detachably to its under side and a suitable supporting-rack with which the shelf engages, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature

in presence of two witnesses.

JOSEPH J. SINGLEY.

Witnesses:

WALTER F. McGinnis, J. E. FRAMPTON.