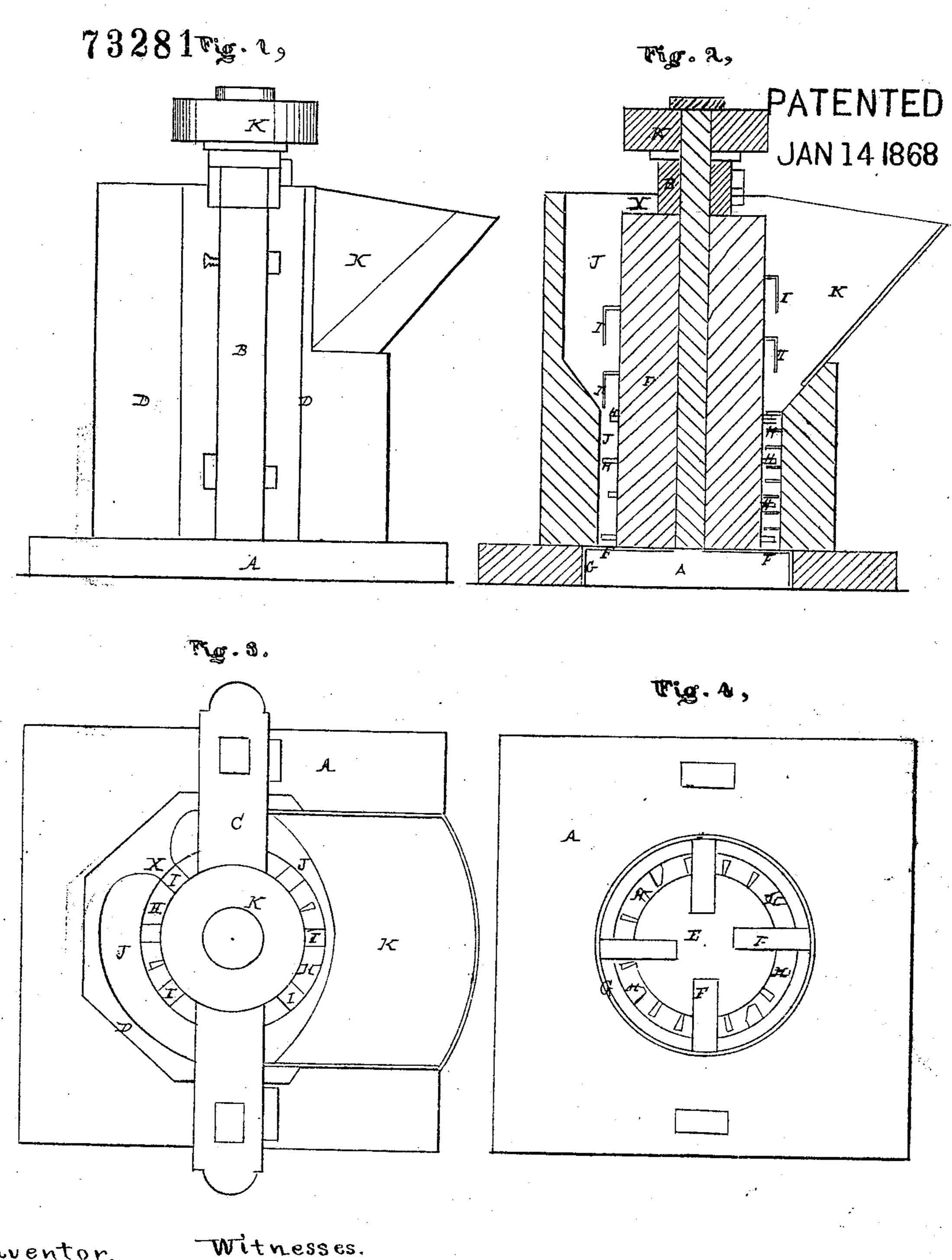
# B. Armstrong. Machine for Making Cheese.



Inventor,

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## Anited States Patent Pkfice.

### B. ARMSTRONG, OF HUNTSBURG, OHIO.

Letters Patent No. 73,281, dated January 14, 1868.

### IMPROVEMENT IN MACHINE FOR MAKING CHEESE,

The Schedule referred to in these Xetters Patent and making part of the same.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, B. Armstrong, of Huntsburg, in the county of Geauga, and State of Ohio, have invented certain new and useful Improvements in Machines for Making Cheese; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which-

Figure 1 is a side view of the machine.

Figure 2 is a vertical section.

Figure 3 is a top view.

Figure 4 is a view of the bottom.

Like letters of reference refer to like parts in the views.

A, fig. 1, is a platform on which is raised a frame, consisting of the posts B and cross-beam C. Between these posts is arranged a case or shell, D, which is constructed in two sections, for the convenience of taking it down, away from the frame, for a purpose hereafter shown. E, fig. 2, is a cylinder or shaft, the upper end of which is journalled in and supported by the beam C, the lower end being retained in place by radial arms, F, fig. 4, fixed to and proceeding from the shaft to a ring, G, to which the extreme ends are attached. This ring is fitted in a circular rabbet, at the lower end of the case. By this means the lower end of the cylinder is kept in position, so that it will revolve truly within the shell. The lower half of the cylinder or shaft is armed with a series of studs, H, which project out near to the sides of the case, as shown in fig. 4, whereas the upper end of the shaft is armed with a series of knives or cutters, I, fig. 3, and bent, as shown in fig. 2. The lower end of the case is also armed with a series of blade, H', so arranged that as the cylinder revolves, they will pass between the studs projecting from the cylinder.

It will be observed that the upper end of the case is made much larger on the inside than at the bottom, thereby giving a larger space between the shell and cylinder, excepting at the projection X, fig. 3, where it approaches the blades as closely as does the lower part. This difference in the size is shown in fig. 2, in which

J is the space between the upper part of the shaft, and J' the lower.

The practical operation of this machine is as follows: The cylinder on being made to revolve by a belt passing around the pulley K, from any appropriate power, the curd is then thrown into the mouth K', fig. 3, which, as it falls down against the knives I, is cut up into core-lumps by the blades, and at the same time much of it is carried around to the point X, when it lodges and accumulates against the shoulder, until the space is filled, when the accumulated curd is further sliced or cut up, and passes to the lower part of the machine, where it is reduced to the proper degree of fineness for the press, by passing between the cutter H' and studs H. The curd thus reduced, falls through the bottom of the machine into a vat, over which the apparatus is placed.

By this machine, a large quantity of curd can be reduced to the proper condition for pressing in a very short time, with a uniformity of fineness unattainable by the old process of chopping by hand, the result of which is to produce a cheese of a uniform texture, and free of lumps. It also saves largely in the expenditure of manual labor. By constructing the shell in two vertical sections, as above said, it can be easily taken apart for the purpose of cleaning, and give free access to the cylinder.

What I claim as my improvement, and desire to secure by Letters Patent, is-

- 1. The cylinder E, provided with cutters I, in combination with the mouth K' and case D, as and for the purpose substantially as set forth.
- 2. The shell or case D and projection X, constructed and arranged, in relation to the cylinder E and cutters, substantially as and for the purpose set forth.
  - 3. The ring G, in combination with the cylinder E and case D, as and for the purpose set forth.

B. ARMSTRONG.

Witnesses:

W. H. BURRIDGE,

J. Holmes.