

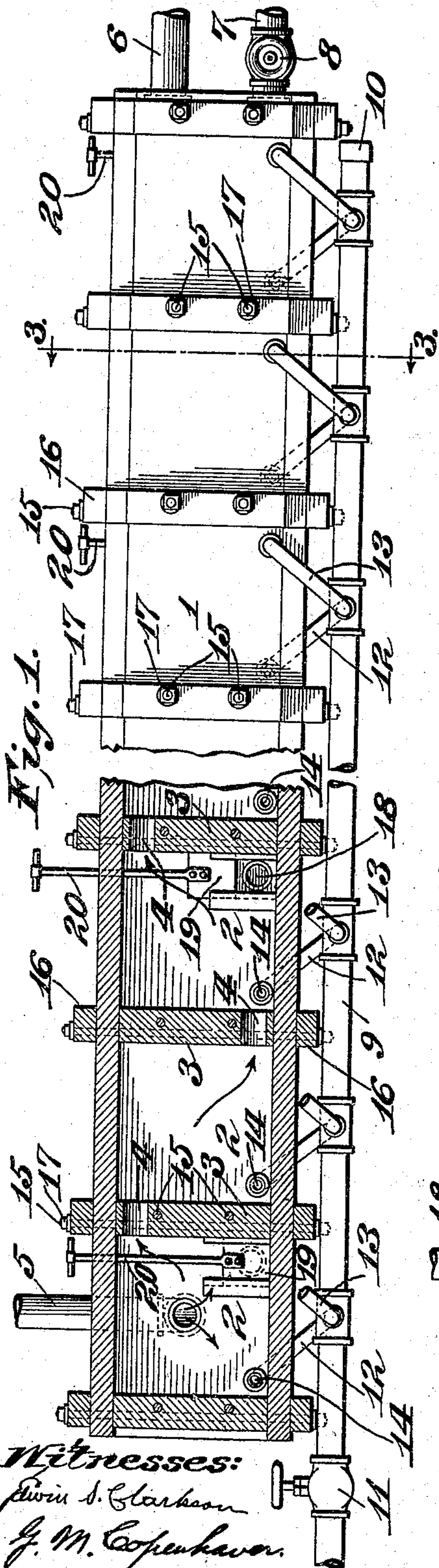
J. B. DODSON.

COOKER.

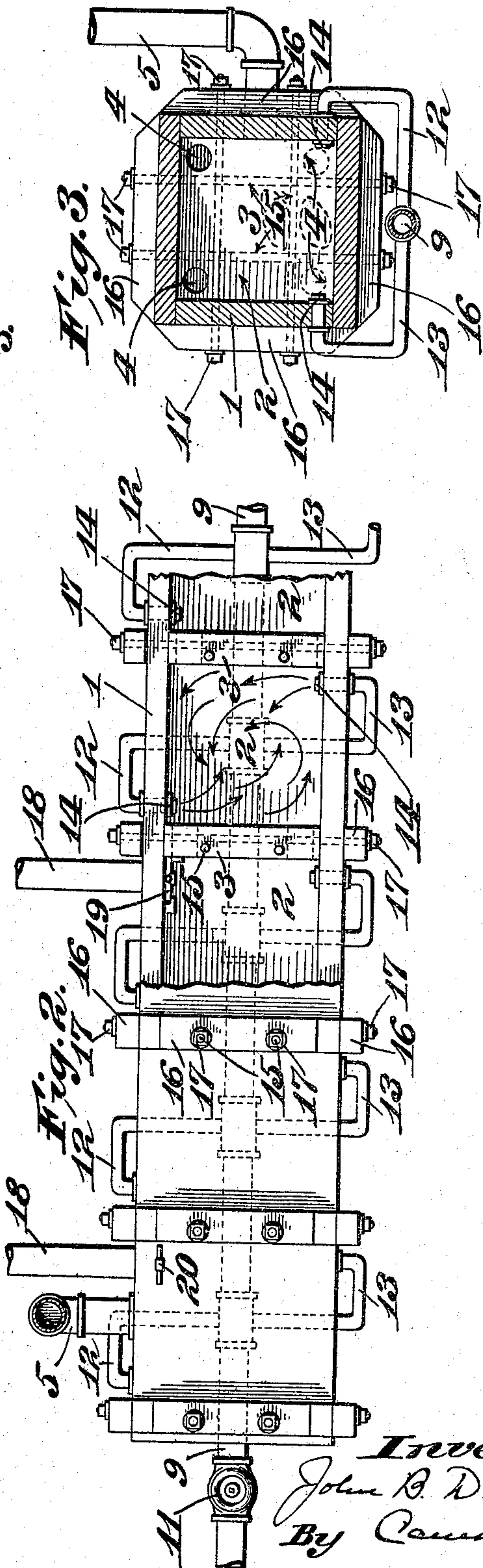
APPLICATION FILED JULY 23, 1908.

930,461.

Patented Aug. 10, 1909.



Witnesses:
Edwin S. Clarkson
J. M. Copenhagen.



Inventor:
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Attys.

UNITED STATES PATENT OFFICE.

JOHN B. DODSON, OF SOUTH PASADENA, CALIFORNIA, ASSIGNOR TO JOHN W. DODSON,
OF ST. LOUIS, MISSOURI.

COOKER.

No. 930,461.

Specification of Letters Patent.

Patented Aug. 10, 1909.

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To all whom it may concern:

Be it known that I, JOHN BENTLEY DODSON, a citizen of the United States, and a resident of South Pasadena, county of Los Angeles, and State of California, have invented a new and useful Improvement in Cookers, of which the following is a specification.

This invention relates to cookers and more particularly to pulp cookers for use in preserving and packing establishments where great quantities of material have to be cooked.

The invention has for its principal objects to facilitate the thorough and economical cooking of the material, to secure cleanliness, and to attain other advantages hereinafter more fully appearing.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming part of this specification and wherein like symbols refer to like parts wherever they occur, Figure 1 is a view of a continuous cooker embodying my invention, the same being shown partly in side elevation and partly in longitudinal section, and the intermediate portion being broken away to shorten the view; Fig. 2 is a plan view of a portion of the cooker with a portion of the top cover removed; and, Fig. 3 is a cross-section on the line 3—3 of Fig. 1.

The cooker comprises an elongated cooking chamber 1 which is preferably divided into a series of compartments 2 by providing partitions 3 preferably at regular intervals throughout said chamber. The partitions are provided with openings or passageways 4 alternately near the top and bottom respectively, so that the pulp or other material being cooked is caused to move in a sinuous or zigzag direction in passing through the cooker. At the intake end of the cooking chamber a supply pipe 5 enters, preferably about the middle of the first compartment. This supply pipe may communicate with any source of supply, but usually a large tank or vat. A pipe 6 leads from the upper portion of the last compartment or discharge end of the cooking chamber and a second pipe 7 is also preferably provided near the bottom of the chamber. This second pipe is provided principally as a drain and it has a suitable cut-off or valve 8.

Running lengthwise thereof beneath the cooking chamber is a main steam pipe 9 one end of which is closed by a cap or plug 10. It is also provided with a suitable cut-off valve 11. This steam pipe 9 is provided with oppositely extending branches 12 and 13, respectively, there being a pair of branch pipes for each compartment 2. The branch pipes enter the compartments as jets 14 at diagonally opposite corners, as more clearly shown in Fig. 2.

In the operation of the cooker the pulp is siphoned or pumped in any suitable manner from the supply vat through the pipe 5 into the first compartment 2. As soon as said compartment becomes filled the pulp overflows into the next compartment and so on through the other compartments until the entire cooking chamber becomes filled.

The pulp is caused to move sinuously through the cooking chamber by the location of the alternately high and low passageways 4 in the partitions 3. As the pulp moves through the chamber it is acted upon by the steam from the jet 14. The steam being under considerable pressure will cause the pulp to swirl so as to agitate the same sufficiently to insure the thorough cooking thereof.

Preferably, the cooking chamber is constructed of heavy lumber, the sides and top and bottom being fastened to the partitions 3 by through-bolts 15. The ends of the bolts 15 extend through cleats or reinforcing pieces 16 and are provided with securing nuts 17. By this arrangement, the cooking chamber may be made strong enough to resist the steam pressure. It also permits of readily dismantling the cooker when necessary.

If desired, suitable drain pipes 18 may be provided in or near the bottom of the several compartments. In this case, it is preferable to provide a slide or drop valve 19 which may be operated by a rod or handle 20 extending to the outside of the case.

The cooker may be otherwise modified without departing from the invention. Therefore, I do not wish to be limited to the exact construction and arrangement shown.

What I claim is:

1. A pulp cooker comprising an elongated closed cooking chamber provided at intervals throughout its length with transversely arranged steam jets located at the sides

thereof, the jets on one side being staggered with respect to those on the opposite side, and said cooker having a pulp inlet opening at one end and pulp outlet opening at the opposite end thereof.

2. A pulp cooker comprising an elongated closed cooking chamber divided into a series of communicating compartments, said compartments being provided with horizontal steam jets directed transversely at diagonally opposite points thereof, said cooker having a pulp inlet opening into one of the endmost compartments and a pulp outlet in the other endmost compartment, whereby a continuous movement of pulp is maintained through said cooker.

3. A pulp cooker comprising an elongated horizontal cooking chamber arranged to continuously receive raw pulp at one end and to discharge the cooked pulp at its opposite end, said chamber being provided with a plurality of transverse partitions having openings arranged to constitute a tortuous passage through said cooker, and steam jets arranged between each two partitions in such position that the steam delivered thereby will effect a whirling movement of the pulp therein.

4. A device for cooking pulp comprising

an elongated closed cooking chamber having a series of transverse partitions dividing it into compartments, said partitions having passageways therethrough at the top and at the bottom thereof alternately and horizontal steam jets in each compartment arranged to deliver steam in substantially parallel lines but in opposite directions, whereby said steam serves to heat, agitate and propel the pulp.

5. A cooker comprising an elongated, horizontal closed cooking chamber divided into a series of compartments, said cooking chamber being provided with intercommunicating passageways between said compartments alternately near the top and bottom thereof, and said compartments being provided with inwardly-directed horizontal steam jets at diagonally opposite points.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses this 6th day of July, 1908, at Los Angeles, Los Angeles county, California.

J. B. DODSON.

Witnesses:

H. G. BRADFORD,
E. H. ROSE.