

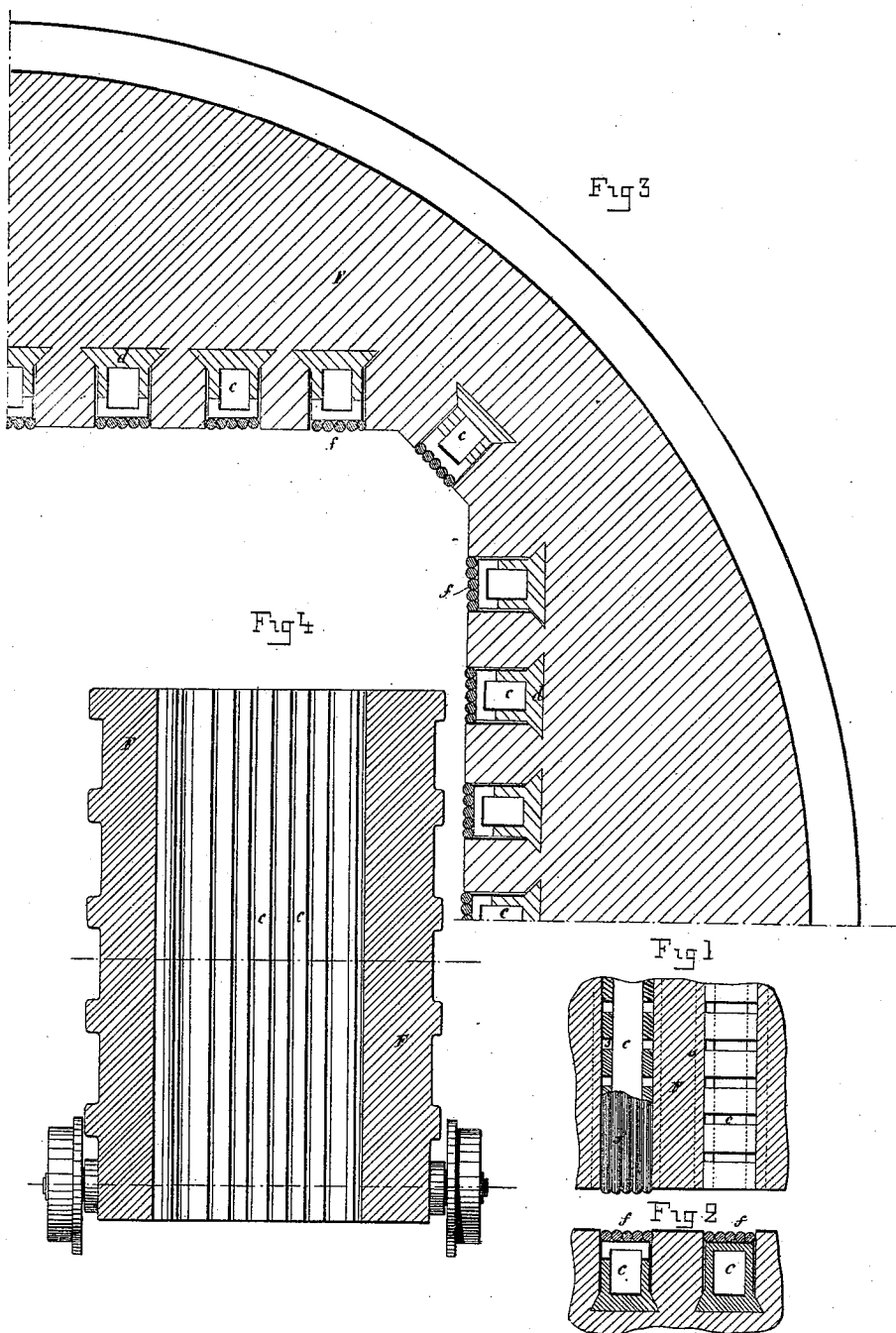
(No Model.)

2 Sheets—Sheet 1.

J. A. DEISS.
PRESS.

No. 499,416.

Patented June 13, 1893.



Witnesses:
E. L. Bolton
Ch. K. Kingston

Inventor:
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By Richard D. [Signature]
his Attorneys.

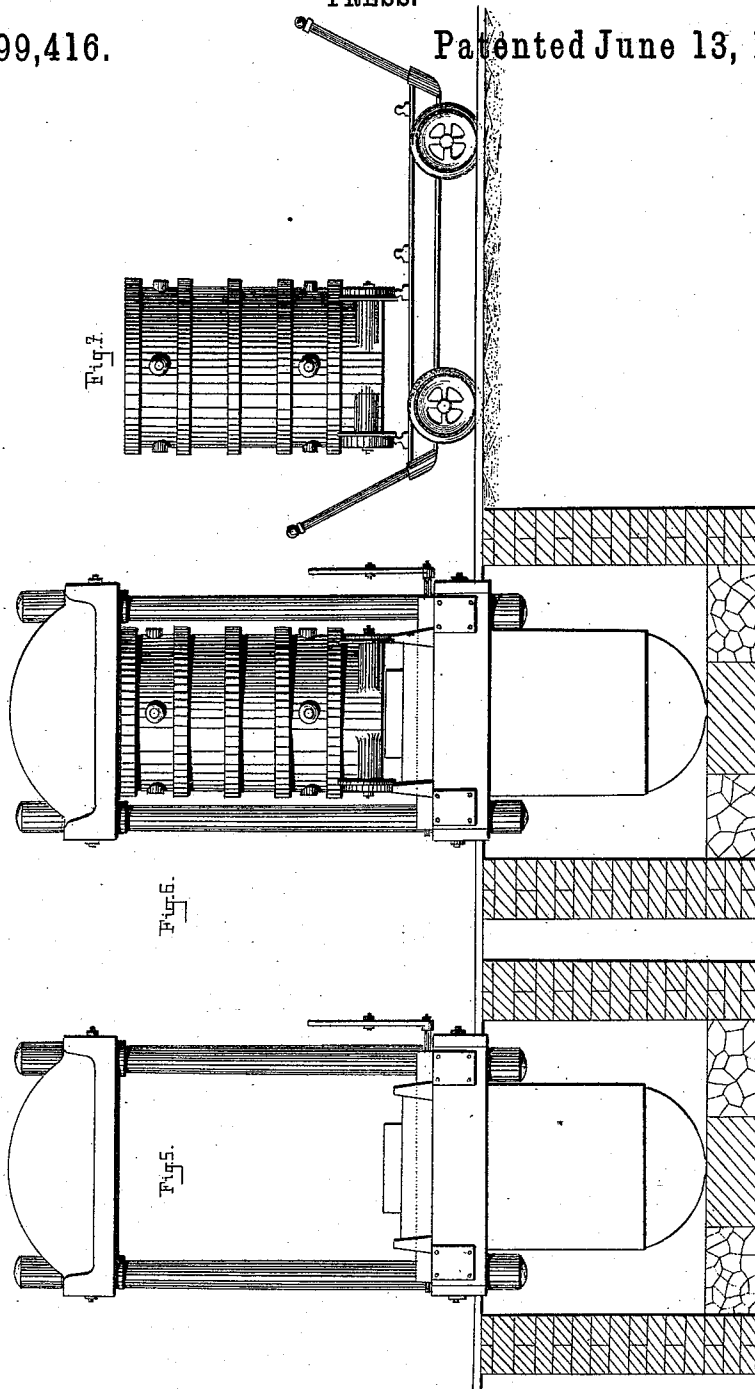
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2 Sheets—Sheet 2.

J. A. DEISS.
PRESS.

No. 499,416.

Patented June 13, 1893.



Witnesses:
C. B. Botton
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UNITED STATES PATENT OFFICE.

JULES A. DEISS, OF MARSEILLES, ASSIGNOR TO THE SOCIÉTÉ ANONYME DU COMPRESSEUR F. JOURDAN, OF AIX, FRANCE.

PRESS.

SPECIFICATION forming part of Letters Patent No. 499,416, dated June 13, 1893.

Application filed November 20, 1891. Serial No. 412,520. (No model.) Patented in France April 20, 1891, No. 212,897; in Turkey July 23, 1891, No. 235; in Italy September 30, 1891, XXV, 30,218; in Spain October 16, 1891, No. 12,611; in Belgium October 17, 1891, No. 96,822; in England October 19, 1891, No. 17,886; in Austria-Hungary December 3, 1891, No. 31,025 and No. 53,680; in Tunis December 12, 1891, No. 43, and in Portugal January 17, 1892, No. 1,647.

To all whom it may concern:

Be it known that I, JULES ALPHONSE DEISS, a citizen of the Republic of France, residing at Marseilles, in the said Republic, have invented certain new and useful Improvements in Presses, (patented in France April 20, 1891, No. 212,897; in Belgium October 17, 1891, No. 96,822; in England October 19, 1891, No. 17,886; in Spain October 16, 1891, No. 12,611; in Portugal January 17, 1892, No. 1,647; in Tunis December 12, 1891, No. 43; in Austria-Hungary December 3, 1891, No. 31,025 and No. 53,680; in Turkey July 23, 1891, No. 235, and in Italy September 30, 1891, Vol. XXV, No. 30,218,) of which the following is a specification.

I have invented this system of press which is based on the use of a movable compressor or metallic cylinder of which the construction will be shown farther on. The metallic sides offering a considerable resistance, a very energetic pressure can be exercised, from which it follows that the results are greater than if bags are used. Moreover the cakes obtained are always alike and present an evenness of cohesion through the entire mass, which has been subjected to an absolutely uniform compression.

In order to make my invention more clearly understood I have shown in the accompanying drawings the means for carrying the same into practical effect.

In said drawings Figures 1 and 2 show in detail the filtering surface of the inner sides of the press box. Fig. 3 is a horizontal view of the press box. Fig. 4, is a vertical section of the same. Figs. 5, 6, and 7 show the arrangement of the press box on the hydraulic press and on the transfer car.

The press box is essentially formed by a cast or other metallic cylinder F presenting at its inner part a rectangular section with cut angles or any other appropriate section. The vertical sides, suitably planed, are provided with longitudinal grooves or holes which serve to lodge the movable tubes *c* whose surface toward the interior of the cylinder is provided with parallel saw cuts *s s*, arranged perpen-

dicularly to the axis of each tube or obliquely or in any other manner. Above each of the canals or inserted tubes, *c*, which have a slight dovetailed end *d* at the bottom to facilitate their putting in place, is placed a series of adjoining metallic wires *f*, which stretched on the said tubes constitute a surface which only under strong pressure allows the liquid pressed from the cellules of the matter under treatment to escape. This liquid penetrates into the interior of the tubes by the saw cuts of which I spoke above, and escapes at the base of the press box at the ends of the tubes into a gutter or basin arranged for this purpose.

According to the nature of the matters to be treated in the press box a filtering tissue is or is not inserted between the stretched wires and the outer side of the vertical flow-off canals. These can have a square sectional form as shown in Fig. 2 but they can be given any other form.

The inner sides of the press box are directly in contact with the compressed matters and present a mixed surface composed of smooth full parts and permeable parts formed by the juxtaposed wires. These wires can have a circular, triangular, square, trapezoidal or any other section. Their spacing can vary. They have the function of letting only the liquids pass and of retaining the entirety of the solid bodies. It is to assure a considerable resistance at the permeable surface which they form, that the wires are arranged over the very solid canals or tubes giving them an indeformable supporting base, leaving at the same time outlet passages for the expressed liquid. This supporting base is formed by the tube, which could be replaced by a solid surface. As soon as the extracted liquid passes to the interior of the canals, it flows off immediately at the base, as specified above.

Each completed press-box is or may be mounted upon wheels so as to facilitate handling and moving of the same. I contemplate employing press-boxes of this description in connection with special means for charging and discharging the same, but as these form no part of the present invention, and as any

ordinary or suitable means for this purpose may be employed it will not be necessary here to describe them.

For compressing the oleaginous seeds or other matters in the cylindrical press-box any powerful compressing device may be used, such as a hydraulic press, a common form of which is shown in Figs. 5 and 6 and to which the press box is conveyed upon a suitable car or truck as shown in Fig. 7.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein described press-box comprising a receptacle or chamber having in its inner wall channels or passages communicating with the chamber by transverse slots or openings, and a series of wires extending lengthwise of said canals or passages and covering the slots or openings, substantially as described.

2. The combination with the wall of the press box having interior passages or canals communicating by a series of openings with the interior of the press-box, of parallel wires covering said openings, substantially as described.

3. The combination with the wall of the press-box having longitudinal grooves, of tubes filling said grooves and communicating with the interior of the press-box by transverse slots or saw-cuts, and straining or filtering wires stretched along the outer faces of said tubes, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

J. A. DEISS.

Witnesses:

AUG. FERANILLE,
L. SONNERY-MARTIN.