J. DAVIS.

DEVICE FOR EXTRACTING AND REFINING CRUDE OIL.

No. 328,925. Patented Oct. 27, 1885.

Fig. 1.

Fig. 2.

Fig. 3.

Witnesses:
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W. A. Daniels.

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Device for Extracting and Refining Crude Oil.

Application filed August 27, 1885. Serial No. 173,443. (No model.)

To all whom it may concern:

Be it known that I, John Davis, a citizen of the United States, residing at Charleston, in the county of Charleston, in the State of South Carolina, have invented a new and useful Improvement in Devices for Extracting and Refining Crude Oil, of which the following is a specification.

My invention relates to improvements in devices for extracting and refining oil, in which two mats of cork-wood, incased on their bottom and top in a lattice-work of wire, and properly connected at their base ends by a flap-hinge, made of leather or of any proper material, and a supplemental mat of similar material, to be used in connection with the hinged mats, for a purpose hereinafter to be designated, constitute the device in question.

The objects of my invention are, first, to provide a device of cheap and easy construction, which shall combine the uses of extracting the crude oil from seed and of refining the same in one and the same operation, and, second, to provide a means of obtaining the aforesaid results in such form as may be used in any hydraulic or steam press. I attain these objects by the mechanism illustrated in the following drawings, in which—

Figure 1 represents my oil extractor and refiner, with the upper hinged mat adjusted at a certain angle with its lower and companion mat; Fig. 2, the device, with a supplemental mat, closed for operating. Fig. 3 is a grouped view of the several elements of my invention, showing the back of the hinged mats with the wire cloth on the same, and the supplemented mat. Similar letters refer to similar parts through the several views.

The hinged mats A and B are placed in a hydraulic or steam press in a boxing of any proper kind for securing the oil when expressed, and the seed c c c placed for crushing, in proper quantities, upon the mat A. The interior surface of the mat B is brought in contact with and so as to cover at a proper angle the highest surface of the seed c c c, with the exterior surface of the same in proper juxtaposition to the ceiling of the press. The requisite degree of pressure being thus obtained, the oil is thereby expressed from the seed c c c, and seeping through the lower mat, A, is refined and clarified, the foreign substances remaining, through absorption, in the pores of the mat A.

When it is desired to proportion the resisting-surface to the quantity of seed to be crushed, and to regulate the one by the other, the supplemental mat C is used, as shown in Fig. 2 of drawings.

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

1. The oil extractor and refiner designated by the letters A B C.

2. The combination, in an oil extractor and refiner, of the cork mats A and B, connected by the hinge a' with the wire-cloth a' a', substantially as shown, and for the purpose specified.

3. In a mechanical device for expressing oil from seed and for refining the same, the cork-wood mats A and B, connected by flap-hinge a' with the supplemental mat C, all substantially as shown, and for the purposes specified.

4. The mechanical device A B C, containing the lower mat, A, for refining the crude oil, combined with the mat B and supplemental mat C, all substantially as described, and for the purposes specified.

John Davis.

Witnesses:

Wm. P. Holmes,
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