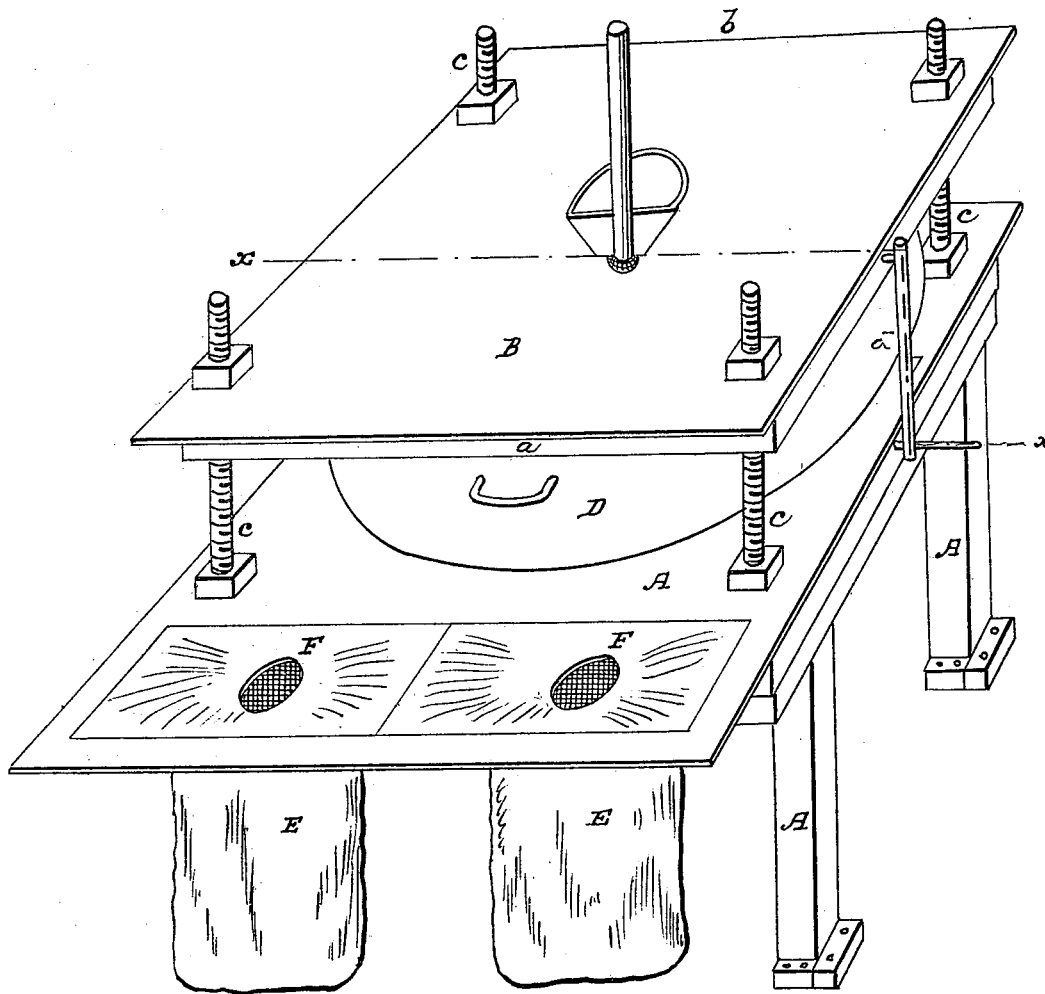


E. HILLS.  
Steam Table.

No. 6,646.

Patented Aug. 14, 1849.

FIG. 1.

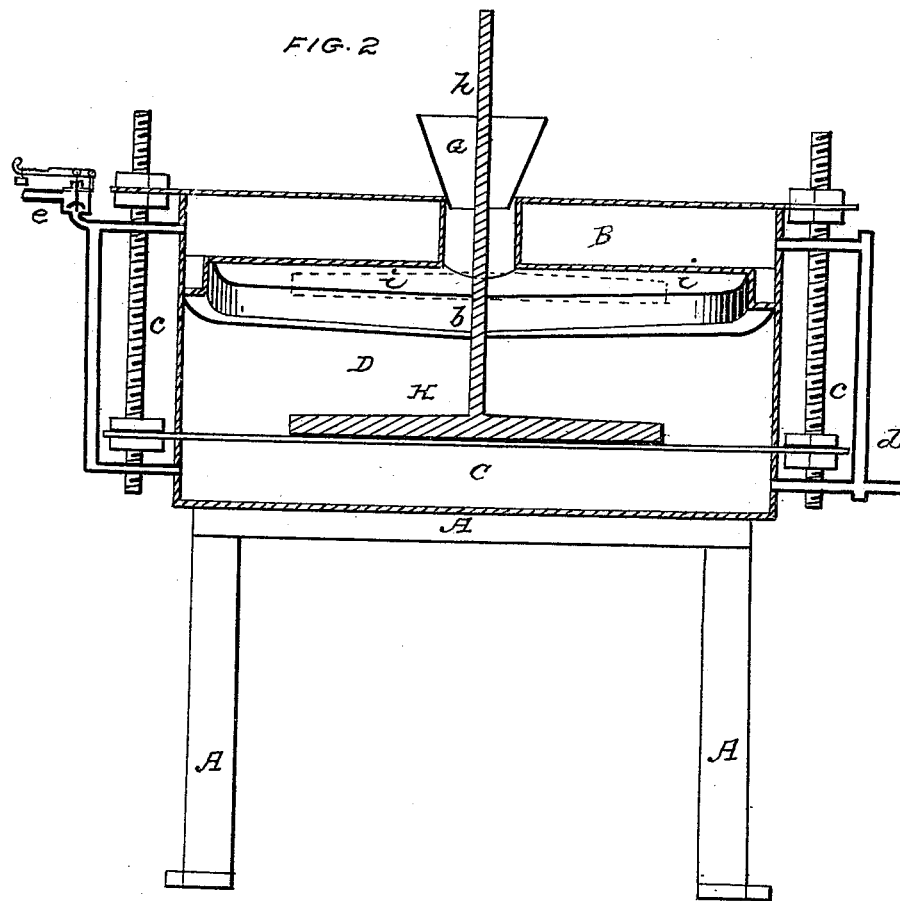


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# UNITED STATES PATENT OFFICE.

EDWIN HILLS, OF CINCINNATI, OHIO.

## STEAM-TABLE.

Specification of Letters Patent No. 6,646, dated August 14, 1849.

*To all whom it may concern:*

Be it known that I, EDWIN HILLS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Steam-Table for Heating Crushed Oil-Seed Preparatory to Subjecting the Same to the Action of the Press to Extract the Oil Therefrom, of which the following is a full and exact description, reference being had to the annexed drawings of the same, making part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a vertical section through the line *x x* of Fig. 1.

The same letters indicate the same parts in all the figures.

In the accompanying drawings A is a frame made of wood or iron upon which the steam table is placed.

B and C are respectively the top and bottom of the table, between which the seed after being crushed is placed for the purpose of being heated, the top and bottom being placed at the requisite distance apart to admit the hoop D between them, by which the seed is inclosed while being heated, for the purpose of protecting it from the cooling effects of the external air.

When properly heated the seed is drawn out by means of the hoop into the bags E into which it runs through the funnels F. To facilitate the entrance and removal of the hoop, the distance between the top and bottom of the table at the front *a* is greater than at the back *b*. The top and bottom are respectively made hollow, but steam tight and are adjusted at the proper distance apart, and also bound together by the screw bolts *c*. The hollow space in the interior of the tables is filled with steam, by means of a pipe *d* which brings it from the boiler supplying the engine that works the press, and grinding apparatus. When the pressure of the steam in the interior of the table is too great, it is permitted to escape through a safety valve into the pipe *e* by which it is conveyed to the open air. The top and bottom are connected by branches of both the discharge and supply steam pipes.

The top of the table is perforated by an opening which admits the descent of the shaft *h* of the stirrer, and the replenishment from time to time of the supply of seed which is poured into the funnel G placed on its upper surface. The stirrer H is attached to a shaft *h* which is connected by

its upper end with the moving part of the machinery which revolves it to stir and keep well mixed the bruised seed, and insures its being more uniformly heated. Before the hoop D can be drawn out, the stirrer H must be removed from it; and for this purpose a recess *i* is formed in the underside of the top B of the table into which the stirrer is raised whenever the hoop is to be withdrawn. For the purpose of preventing accidents from the continued revolution of the stirrer when withdrawn from the hoop, I attach to the gear that drives it, which is placed at its upper end, a disengaging and re-engaging apparatus of any of the usual forms, which disconnects it from the moving parts when it is raised, and re-connects it to them again whenever it is lowered. The funnels F at the front of the table are provided with hooks for the purpose of supporting the bags.

The several parts of the apparatus may be made of any materials deemed most suitable, but I prefer cast or wrought iron. The arrangement and proportions may also be varied to any extent that may be found advisable.

As I have introduced nothing new in the process of heating the seed, and that process is well understood by the manufacturers of vegetable oil, I do not deem a description of the same to be here necessary.

This table and the hoop may be made either round or square as may be preferred, and the top and hoop may be connected together if that arrangement should be found most advantageous.

What I claim as my invention and desire to secure by Letters Patent, is—

1. The combination of the hollow top and bottom of the table, with the hoop; the same being made and arranged substantially in the manner and for the purpose herein described.

2. I likewise claim making the hollow top with a recess in its under side into which to raise the stirrer while the hoop is being withdrawn in the manner and for the purpose herein set forth.

In testimony whereof I have hereunto subscribed by name this seventeenth day of February A. D. 1849.

EDWIN HILLS.

Witnesses:

WM. D. WASHINGTON.

P. H. WATSON.