

No. 736,484.

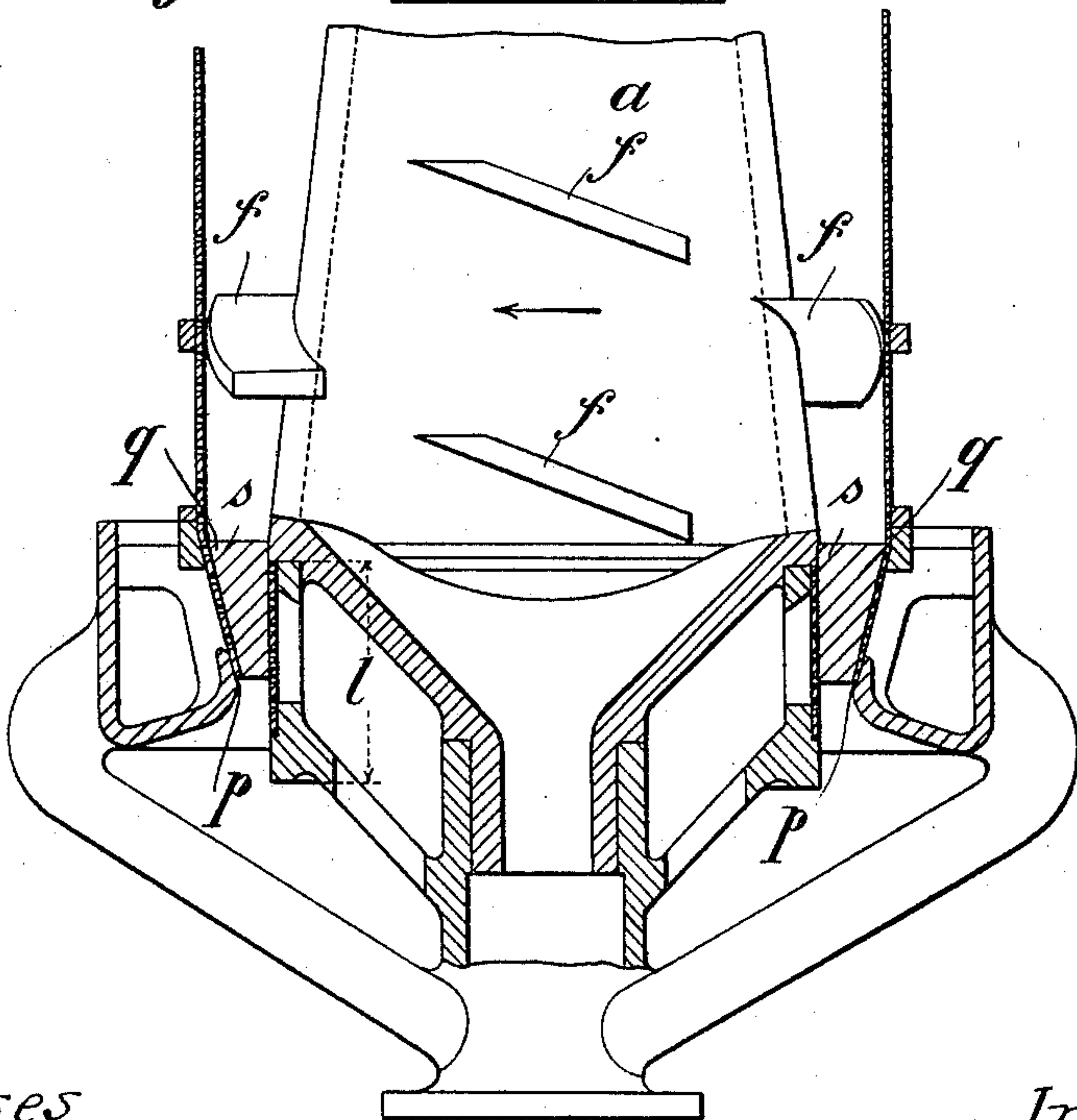
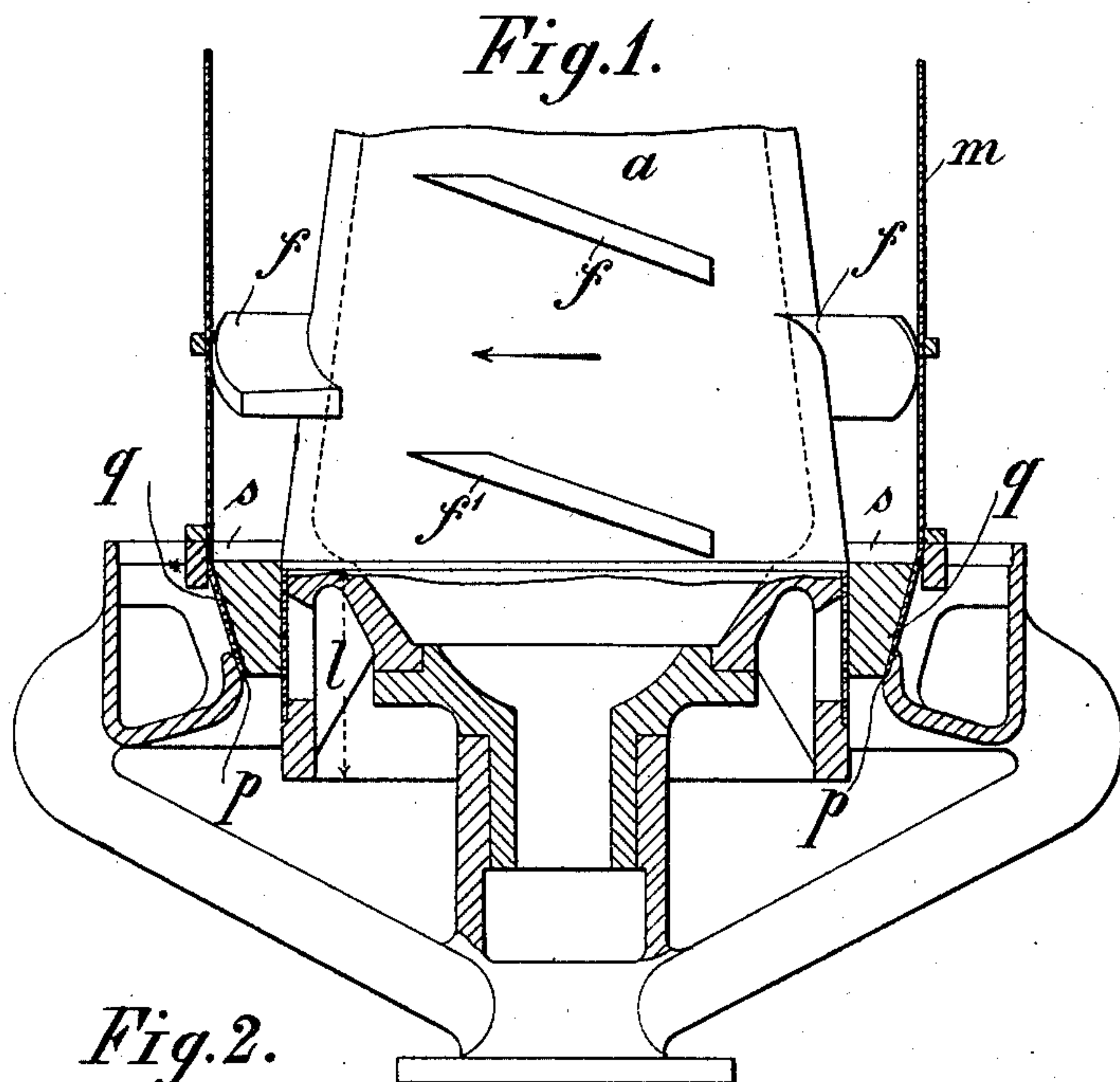
PATENTED AUG. 18, 1903.

W. BOCK.

PRESS FOR PRESSING THE PARINGS OF DIFFUSION CHAMBERS
IN THE MANUFACTURE OF SUGAR.

APPLICATION FILED SEPT. 13, 1902.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

WALTER BOCK, OF BROMBERG, GERMANY.

PRESS FOR PRESSING THE PARINGS OF DIFFUSION-CHAMBERS IN THE MANUFACTURE OF SUGAR.

SPECIFICATION forming part of Letters Patent No. 736,484, dated August 18, 1903.

Application filed September 13, 1902. Serial No. 123,238. (No model.)

To all whom it may concern:

Be it known that I, WALTER BOCK, a subject of the German Emperor, residing at 6 Berlinerstrasse, Bromberg, in the Empire of Germany, have invented certain new and useful Improvements in Presses for Pressing the Parings of Diffusion-Chambers in the Manufacture of Sugar, of which the following is a specification.

In the accompanying drawings, Figure 1 is a view, partially in section and partially in elevation, of the lower portion of a paring-press; and Fig. 2 shows a modification thereof.

For pressing the residual parings from diffusion vessels in sugar factories are preferably used presses with a vertical conical shaft. In the form of presses hitherto used it frequently happens that when the supply of material is temporarily interrupted while the press is in motion the latter becomes empty. In this case it is a difficult and tedious process to uniformly fill the press again so that the parings are uniformly and well pressed.

The object of this invention is to overcome this drawback by leaving a space where the pressed material leaves the machine, which space cannot be entirely emptied.

In the accompanying drawings in both figures are shown the lower portion of a paring-press, in which a is the press-shaft, which turns in the direction indicated by the arrow, and m is a perforated sieve-cylinder. Into the space between the two the parings to be pressed are introduced, and these parings are forced in a downward direction by means of the blades $f f'$. The shaft a is conical as far as the line $s s$, and from there for the distance l is formed cylindrical, with a diameter exactly or nearly exactly the same as the largest diameter of the cone, so that there is no actual corner on the line $s s$. The sieve-cylinder m is made cylindrical as far as $s s$, from which point to $p p$ it is reduced in diameter, so as to form part of an inverted cone. The last presser-blade is f' , the hinder end of which revolves on line $s s$. In the space q , between the lower narrowed portion of the sieve-casing and the cylindrical part of the press-shaft, there is no presser-blade or other such instrument fixed on the shaft to advance

the material. The parings which occupy the space q can also only be made to advance when a corresponding amount of material is introduced into the upper part of the press and pressed thence into the space q by the blade f' . If now no more material is supplied to the press while in motion, the parings in the press will be forced down so far as the line made by the hinder end of the lowest blade f' and will be by this latter pressed into the space q . If the shaft a continues to turn, no more material is forced out of the press, but it continues to occupy the space q and also forms what may be termed the "bottom" of the press. Upon introducing more material the parings are forced down by the working of the press with a regular pressure right at the commencement. This blocking up by means of the compressed parings has the advantage that the press is equally filled all around its periphery and a more uniform and satisfactory pressure is secured.

In Fig. 2 a slight modification of the invention is shown in which the cylindrical portion l of the shaft is no longer fast with the latter, but is replaced by a fixed cylinder overlaid with a perforated iron plate, in which cylinder the press-shaft a turns. This modification may be employed when it is desired to obviate the possibility of the mass of material collected in the space q revolving with the shaft a .

What I claim, and desire to secure by Letters Patent of the United States, is—

In a machine for pressing the parings from the diffusion vessels of sugar manufactories, the combination of a shaft having a conical portion carrying blades and a cylindrical portion beyond the blades, with a cylindrical sieve surrounding said shaft and having a conical lower portion arranged opposite the cylindrical portion of the shaft and separated therefrom to form a space into which the parings are pressed by said blades on the shaft, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

WALTER BOCK.

Witnesses:

CÚRT PFEIFFER,
MOSES FINZI.