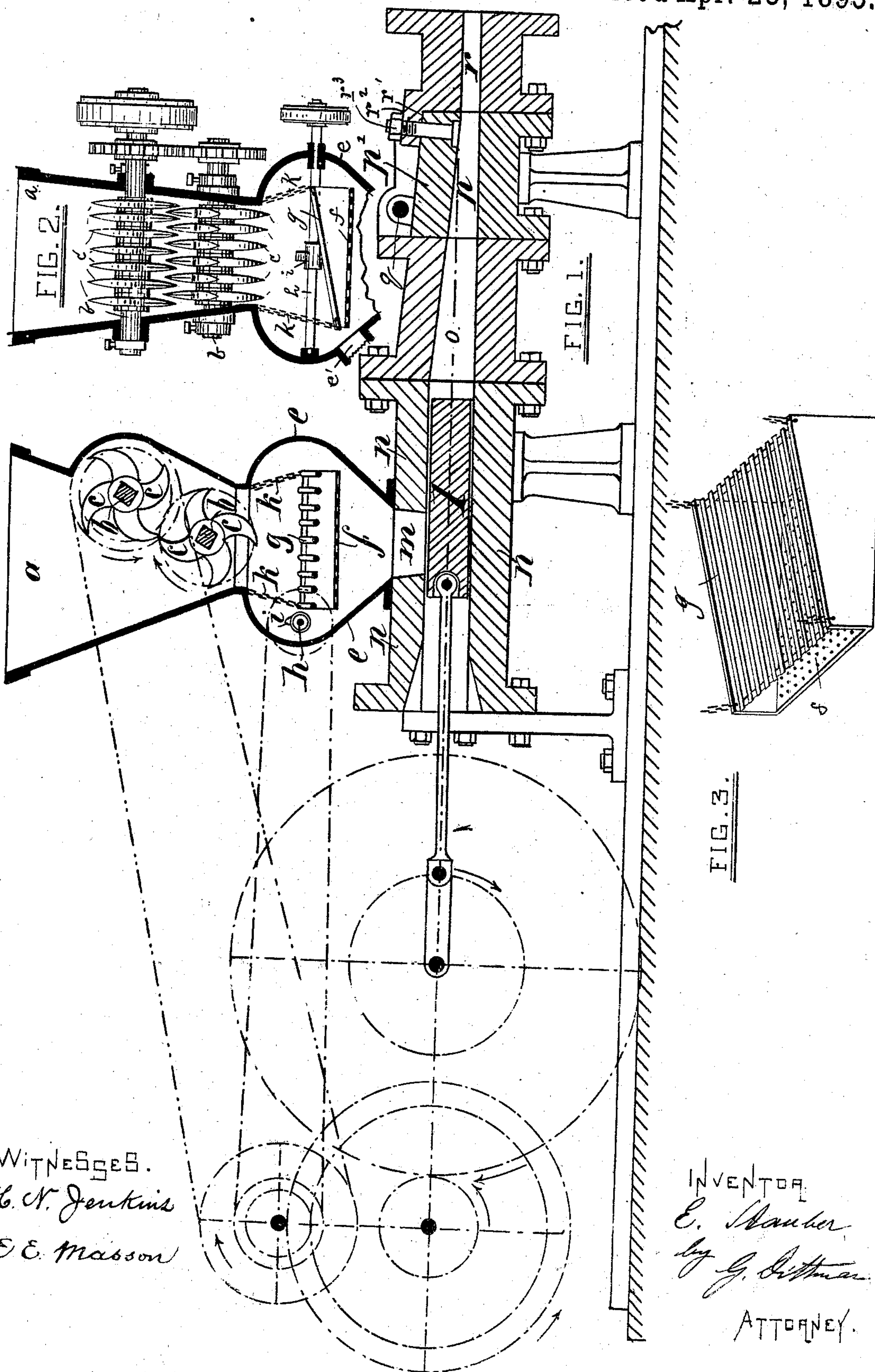


(No Model.)

E. STAUBER.  
MACHINE FOR DISINTEGRATING AND COMPRESSING PEAT.  
No. 537,909.

Patented Apr. 23, 1895.



WITNESSES.  
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# UNITED STATES PATENT OFFICE.

EMANUEL STAUBER, OF BERLIN, GERMANY.

## MACHINE FOR DISINTEGRATING AND COMPRESSING PEAT.

SPECIFICATION forming part of Letters Patent No. 537,909, dated April 23, 1895.

Application filed May 31, 1894. Serial No. 513,090. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL STAUBER, a subject of the German Emperor, residing at Berlin, Germany, have invented certain Improvements in Machines for Disintegrating and Compressing Peat, of which the following is a specification.

This invention relates to certain improvements in machines for disintegrating and compressing peat, such as are used in the manufacture of peat briquet, and the object of the invention is to provide a machine of a simple and inexpensive construction, continuous in operation, which shall be adapted to disintegrate the wet peat and remove the coarse fibers therefrom and to compress and partly dry the disintegrated peat and deliver the same in a condition to be further dried and coked.

My invention also contemplates certain improvements in the machine whereby it is made adjustable so as to compress the peat to different degrees and also to different sizes of briquets, all as will be hereinafter fully set forth.

The novel features of my invention will be carefully defined in the claims.

In the drawings, Figure 1 represents a vertical longitudinal section of the machine; Fig. 2, shows a cross-section through the hoppers thereof. Fig. 3 is a perspective view of the grid and screen employed in the machine.

In the said drawings *n* represents the compression cylinder having a piston *l*, to which longitudinal movement is communicated by means of any suitable engine or other source of power. The cylinder *n* has a feed opening *m* above which is arranged a chest *e*, of a somewhat globular or spheroidal form crowned by a feed-hopper *a*, wherein are mounted in position to receive the peat supplied to the hopper, two transverse shafts *b, b*, driven from the engine and provided with cutters or teeth *c*. The shafts *b, b*, are so geared as to cause the cutters *c* to rotate in opposite directions as indicated by the arrows, whereby the peat is torn or disintegrated. The teeth *c*, deliver the torn or disintegrated peat down into the chest *e*, wherein is suspended in chains, *k*, a swinging, inclined grid or grate *g*, arranged in position under the said teeth to catch the long fibers of the peat and convey the same

away laterally through an opening *e'* in the side of chest *e*.

To the under side of the swinging grid *g* is secured a sieve *f* adapted to sift and mix the finer particles of the peat and in order to move the grid in the chest *e*, a transverse shaft *h*, driven from the engine is journaled in said chest, and provided with a cam *i*, adapted to strike and move the said grid longitudinally so as to cause it to swing in the manner of a pendulum; or if desired a series of these grids *g* may be employed and a series of cams *i* also provided, said cams being timed so as to cause the grids to move in different directions; or in lieu of a cam *i* as shown, connecting links may be employed between shaft *h* and the grid, but I prefer the construction shown as the cheapest and most durable.

In order to compress the peat, I provide the forward end of the cylinder *n* with a removable section *o*, having a contracted bore, as clearly shown, whereby as the peat is forced through said section *o*, by the forward movement of the piston *l* it will be compressed and a portion of the water forced therefrom, which water will escape through suitable outlets, (not shown.) In order to still further compress the peat I provide a section *p*, having a hinged top or cover *p'* hinged at *q* to which may be connected at *r'* one of a series of mouths *r*, provided with different sized bores. In order to make the section *p* adjustable to section *r*, said section *r* is provided with a rearward extension *r<sup>2</sup>* to which said hinged cover *p'* is adapted to be drawn by means of a bolt or screw *r<sup>3</sup>*, as clearly seen in the drawings.

My invention is susceptible of considerable modification as will be obvious to those skilled in the art, and for this reason I do not wish to be understood as limiting myself to the exact construction and arrangement herein shown.

Having thus described my invention, I claim—

1. In a device for disintegrating and compressing peat, the combination with a compressing cylinder having a feed opening and a piston therein of a chest, arranged over said feed opening, a feed hopper arranged over said chest, a disintegrating device in said hopper, a grid arranged in said chest, and a shaking sieve arranged between said disintegrat-



ing device and the feed opening substantially as set forth.

2. In a device for disintegrating and compressing peat, the combination with a compressing cylinder having a feed opening and a piston therein, of a chest arranged over said feed opening a feed hopper arranged over said chest, a disintegrating device arranged in said hopper, a grid suspended in chains in said chest between said disintegrating device and said feed opening, a sieve connected to said grid, a shaft, rotatively mounted in said chest, and means for communicating the movement of said shaft to said grid, substantially as set forth.

3. In a device for disintegrating and compressing peat, the combination with a compressing cylinder having a feed opening and a piston therein, of a chest having an opening in its wall and arranged over said feed opening, a feed hopper over said chest, a disintegrating device arranged in said hopper, an inclined grid arranged in the chest between the disintegrating device and said feed open-

ing, and adapted to convey the coarse fiber through the opening in the wall of the chest, a sieve connected to said grid, and means for moving said grid, substantially as set forth.

4. In a device for compressing peat, the combination with a compressing cylinder having a feed opening and a piston arranged therein, of a section *p* secured to said compressing cylinder and provided with a bore coinciding with the bore of the cylinder, said section having a hinged cover, a section *r*, connected to section *p*, and also provided with a bore coinciding with the bore of said section *p*, and means for adjusting the inclination of the cover of section *p*, to the size of the bore of section *r*, substantially as set forth.

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

EMANUEL STAUBER.

Witnesses:

MAX SCHUNING,  
W. HAUPT.