

No. 858,352.

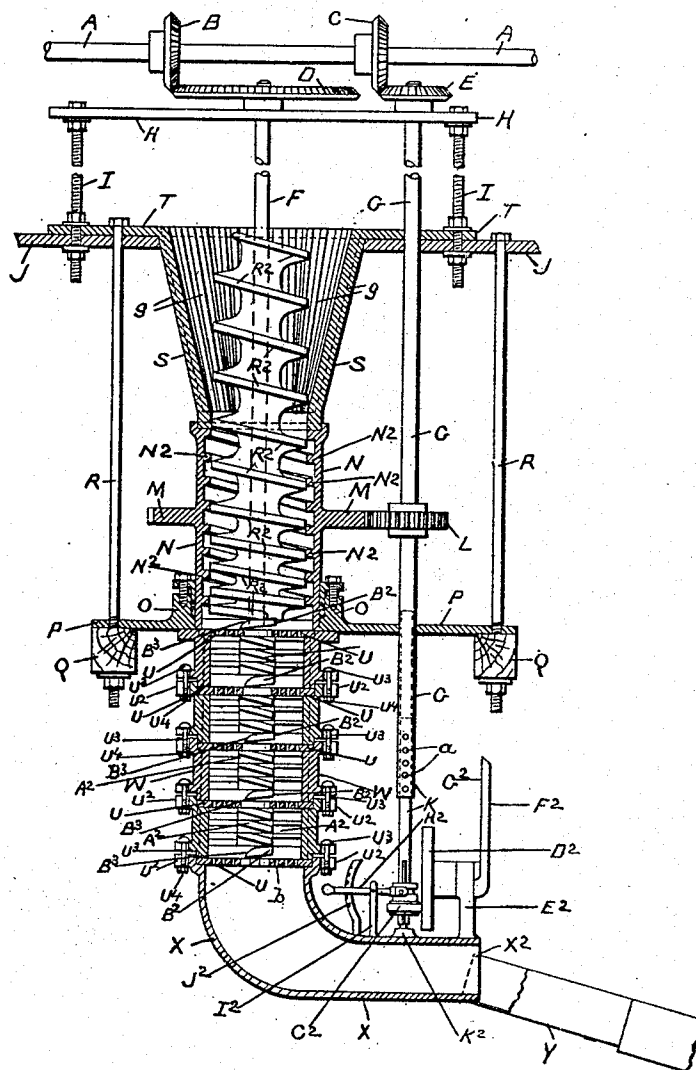
PATENTED JUNE 25, 1907.

M. C. SHARPNECK.
MACHINE FOR FORMING AND COMPRESSING PEAT, &c., INTO BLOCKS
OR CAKES.

APPLICATION FILED OCT. 13, 1906.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
Roswell F. Hatch
Sumner B. Robinson

Inventor:
Matthew C. Sharpneck
Albert W. Brown.
by Attorney.

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Fig. 2.

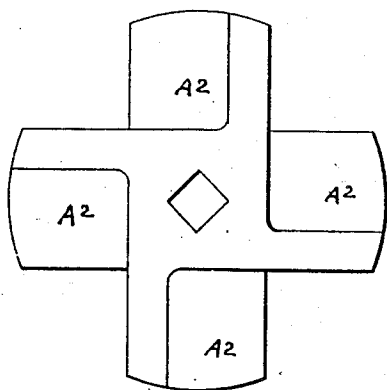


Fig. 3.

2 SHEETS—SHEET 2.

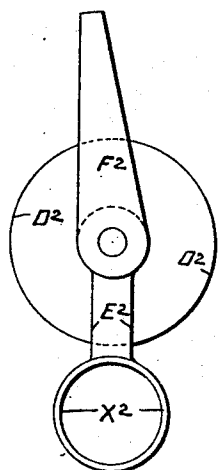
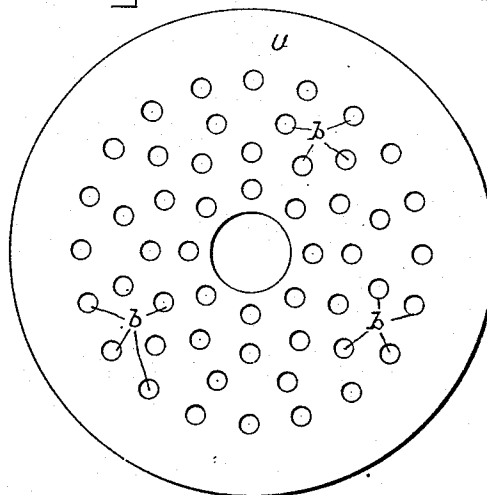


Fig. 6.

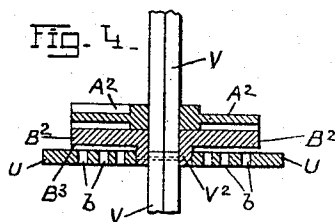
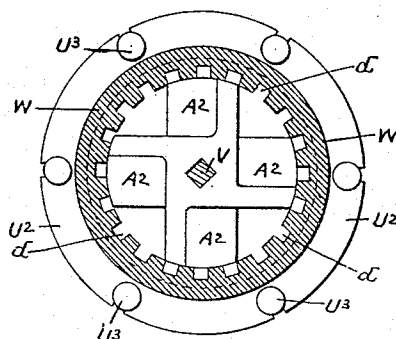


Fig. 5.



Witnesses:

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by Albert W. Brown.
Attorney.

German pat. 26, 177.
 Dr. pat. 57334, 1892 (25-14)
 Fr. " to Taylor, 259, 048 III. Dec. 21, 1892, fol. 12 (107-30)

UNITED STATES PATENT OFFICE.

MATTHEW C. SHARPNECK, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
 AMERICAN PEAT MACHINERY COMPANY, OF PORTLAND, MAINE, A COR-
 PORATION OF MAINE.

MACHINE FOR FORMING AND COMPRESSING PEAT, &c., INTO BLOCKS OR CAKES.

No. 858,352.

Specification of Letters Patent.

Patented June 25, 1907.

Application filed October 13, 1906. Serial No. 338,871.

To all whom it may concern:

Be it known that I, MATTHEW C. SHARPNECK, a citizen of the United States, residing at the city of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Machines for Forming and Compressing Peat, &c., into Blocks or Cakes, of which the following is a specification.

10 This invention consists in certain improvements, all substantially as hereinafter described, in machines for compressing and otherwise forming peat, etc., into blocks or cakes for use as fuel.

15 In the drawings, Figure 1, mainly, is a central vertical section of the machine, or apparatus, of this invention, but the driving mechanism and some other parts thereof are shown in side elevation. Figs. 2, 3, 4, 5 and 20 6 are severally detached and enlarged views of different portions of the machine shown as one whole in Fig. 1, and all as will hereinafter fully appear.

In the drawings, A is a horizontal shaft, to 25 be supported and driven in any suitable manner. B and C are similar vertical bevel gear-wheels carried by and turning with shaft A. D and E are horizontal bevel gear-wheels meshing the gear-wheels B and C, res- 30 pectively, and each carried by a separate vertical shaft F and G, respectively, which are located alongside of each other and by and through these shafts, both of which are actuated from a common driving-shaft A, 35 the necessary movements are transmitted to the mechanism of the apparatus of this invention. Each vertical shaft F and G, at its upper end-portion, is supported and turns in suitable bearings of a horizontal platform H 40 that is supported by vertical posts I from a common flooring J, and all so that the platform H may be adjusted and secured in a horizontal position relative to the flooring J as may be desired. The shaft G, near its 45 lower end-portion, as at K, is in separate or detachable lengths telescoped together, and there they have a pin and socket-connection a, whereby their parts, as the shaft is lengthened or shortened within given limits, can be 50 fastened together and so adapted to turn as one, and the extreme lower end of this shaft G, turns in a step-block K², suitably supported, all as hereinafter appears.

L is a horizontal pinion gear-wheel, inter- 55 mediate of the length of and turning with the shaft G, and meshing a larger horizontal gear-wheel M surrounding and carried by a vertical cylindrical shell or casing N, which, at its lower end, enters into a bearing-socket O therefor of a stationary horizontal platform 6c P located below the meshing horizontal gear-wheels L, M, and which is supported by fixed horizontal beams Q supported by vertical rods R from the flooring J. The bearing-socket O is adapted, in any suitable manner, 65 as a stuffing-box, for said entering-end of the shell N, while allowing the shell to freely and properly turn therein.

S is a vertical funnel or hopper-shaped 70 basin, which extends upward from the upper open end of the cylindrical shell N, and is connected therewith so that the shell can freely turn on its lower open end, making, however, close joint therewith, and the upper open end of this hopper has a horizontal out- 75 ward flaring flange T and by and through this flange T, and otherwise, as shown, the hopper is rigidly secured to the flooring J, and thus it is fastened in position and in con- 80 nection or jointing with the shell N as has been explained. The hopper S and casing N are axially coincident with each other and with the vertical shaft F, before referred to, and within both of them, said shaft is pro- 85 vided with a spirally running-flange R² of substantially corresponding diameter throughout, but within the casing of a gradu- 90 ally decreasing pitch toward and to the extreme lower end of the shaft, where it, the shaft, is arranged to turn in a suitable bear- 95 ing of a fixed horizontal partition or floor U through which it extends and in which it is adapted to turn.

The shaft F, at its lower end, is continued 95 in a vertical shaft V, Fig. 4, in horizontal section of square or polygonal shape, Figs. 2, 4 and 5, and axially coincident with the shaft F. The shaft V is in separable sections sever- 100 ally held together by a collar fastened by a pin, as shown at V², Fig. 4, and these several collars are each arranged to turn in a fixed horizontal partition or floor similar to the floor U before referred to and all so lettered, and these several floors U are fixed in posi- 105 tion at intermediate points of a common cylindrical and stationary shell or casing W

13th Amend., 506, 151, Q. 26. 3, 1893 (25-14)

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internally in direct and axial downward continuation of the shell N. This shell W is in sections corresponding to its several horizontal partitions U, and the sections are joined, the one to the other, through their lateral flanges U² and headed screw-bolts U³ and screw-nuts U⁴ properly applied the two latter, bolts and nuts, to the former flanges. The sectional shell W, at its lower end and below its lowest partition U, is continued in a spout or tube X detachably attached thereto and which, beginning at its communication with the shell W, has a downward rounding turn and thence is continued, more or less, horizontally, but of a reduced internal diameter toward and to and terminates at its outer or discharging end X², where it opens to the upper end of a downwardly inclining table or chute Y, having parallel upright sides, and a closed bottom or floor, but open at and along its upper side. This chute Y at its lower end is to communicate with an endless-traveling belt or carrier (not shown) leading to an oven or kiln suitable for drying peat, which peat, by means of the apparatus of this invention is to be delivered thereto from said endless-belt, and as so delivered is in separated or distinct compressed blocks or cakes, all as will hereinafter more fully appear.

The shell N, interiorly, has a spirally running flange N² corresponding to the exteriorly running flange or spiral R² of the shaft F at that portion therewithin, and these spiral flanges N² and R² are respectively located in relation to each other, so that as the shell and screw rotate, the directions of which, as will appear from their connection with the common driving-shaft A, are opposite to each other, the outer edges of the respective flanges will coöperate together, substantially similar to the cutting-edges of shear, scissors and other such like blades.

The several fixed horizontal partitions U, the one making a floor to the rotating-shell N and the others severally making floors to the respective sections of the stationary casing W in continuation of said rotating-shell N, have severally a series of perforations *b* through their thickness, Figs. 3 and 4.

Each section of the sectional casing W (Fig. 5) has a series of parallel vertical grooves *d* about its internal periphery and the internal diameter of the ribs between said grooves corresponds substantially to the external or outer diameter of separated radial-arms or wings A², Figs. 2, 4 and 5, severally arranged, in a quartering series about, and as to those of each series, in a spiral line or direction on their respective sections of the sectional shaft V. These several arms A² by their outer edges pass by the vertical edges of the said vertical ribs of the sectional-casing W and coöperate therewith in the operation of the machine, as will hereinafter appear.

Again the shaft F, in its portion, carrying the

spiral running flange R², and also in each of the sectional portions constituting the extension V thereof, as has been explained, is provided with separate radial wings or blades B², each of which has a cutting-edge B³ at its forward side or edge relative to the direction of its movement, or in other words, to the direction of rotation of the shaft F and V and these several cutting edges as the shaft F and its extension V rotate act in coöperation with the edges of said several perforations *b* and with the upper surface of said partitions U to secure a cutting or severing of whatever is or may be in their said path of movement or travel, all as will hereinafter more fully appear.

The vertical shaft G, herein before referred to, carries on its lower end-portion a splined connected horizontal friction pinion-wheel C² which is arranged for running in frictional contact with the face of a vertical frictional disk or plate D² that is journaled on a fixed upright E² and carries a radially extending blade F² having a cutting-edge G² situated in relation to the discharging-end X² of the spout X so that as the blade is swung around by the rotation of the journaled-disk D² which carries it as described, said cutting edge will be thereby passed or moved across the discharging-end X² of said spout, and in so passing effect a severing or cutting off of what is projecting therefrom, or in other words, a portion of the peat which, by the operation of the machine described, and which operation is to be presently explained, has been projected therefrom.

The described spline-connection of the friction-pinion C² allows it to be adjusted vertically on its carrying-shaft G, as may be desired, and thus it can be placed in frictional running contact, either farther from, or nearer to the axis of rotation of the vertical frictional-disk D² and so thereby the said swing of the cutting-blade across the discharging-end of the chute X relative to the run of the peat therefrom, can be regulated for reasons and as will further hereinafter appear. For adjusting the splined connected friction-gear as above stated a forked-lever H² is provided, and this forked-lever, by its tines, engages a peripheral-groove of the hub of said pinion C² and it is fulcrumed on a suitable support I² and is arranged to be held against accidental displacement, after it has been once swung or operated to place the friction-pinion C² as may be desired, by engaging it with the then proper notch of the series of notches of a stationary upright arm J² suitably located therefor.

The peat to be treated and with the apparatus of this invention, is, after being gathered and prior to being treated therewith, allowed to substantially dry out its contained moisture, by simply exposing it to the air for a sufficient length of time, on which, it, then, with the mechanism described in motion, is fed by

hand, or otherwise suitably, into the hopper S, as from time to time may be requisite or proper. So fed in, the peat is by the then operation of the rotating and externally spirally-flanged shaft F within the hopper in
 5 coöperation with the then simultaneous operation of the rotating and internally spirally-flanged shell N not only fed, but also more or less pressed downward and compressed
 10 together, and so fed, pressed, and compressed, it is more or less cut up or disintegrated by the coöperative action of the edges of the two sets of spirals as they pass each other, and further forced down upon and
 15 through the perforations of the bottom U of the shell into the stationary shell or casing W, and as so forced still further cut up or disintegrated by the action of the cutting-blades B² thereon, and entering into the first division of said stationary-shell it is therein
 20 further forced along, and pressed, and compressed and further disintegrated, and from thence forced through the perforations of its floor or bottom U and similarly entered into
 25 and similarly treated or acted on in the next following division, and so on through the whole series thereof, when it is finally entered, and under pressure and compression into the spout X, and therein being forced
 30 and pressed along and further compressed it passes forward and out at the open or discharging end X² thereof, where at intervals, or at portions of its so exuded length, it is cut off into blocks or cakes by the cutting-blade
 35 F², as it is caused to revolve at and across said open-end X², and which blocks or cakes, one after another, drop, as each is so cut, onto the incline chute Y and thence in rolling and tumbling over thereon they pass down
 40 along said chute, from which they are delivered and drop onto an endless - belt, (before mentioned but not shown) and are thereby carried into an oven or kiln of suitable kind for being dried and so made ready for use
 45 as fuel.

This, in substance, is the general operation of the machine of this invention. Considered more closely, it will be observed that the effect of the combined operation of the parts
 50 of the machine upon the peat, which is caused to pass from the hopper to and into the rotating-shell N below it, and therefrom to and through the several divisions of the stationary-shell W next below, all as has
 55 been described, is to secure to the highest degree or extent possible, not only a thorough mixing of the several constituents or particles of the peat, but also the disintegration and cutting up of its constituents or particles, and all in a manner, whereby the mass
 60 is reduced to a most pulpy and homogeneous condition or state, while, at the same time, it is compressed or pressed into a most compact form and condition, which is further enhanced or increased, because of the resist-

ance to the passage of the so-compressed mass along the spout X before it can escape therefrom as described, secured by the reduction or contraction, in its internal diameter
 70 between its end-portion, at which it received the mass of pressed peat from the lower section of the stationary shell W, and its discharging-end X².

The vertical ribbing or grooving of the interior wall of the several sections of the stationary-shell W is further advantageous in
 75 that it tends to facilitate the carrying by the rotatory movement of the wings or arms A² the peat mass about the chamber and also to secure a better or more efficient mixing of the
 80 constituents of the mass by the action of said wings or arms thereon. And for this reason it is also preferable that the interior periphery of the hopper S should have vertically running grooves, as shown, Fig. 1, by the
 85 dotted lines in the opposite side-walls of the hopper and by full lines back of the plane of said sectional side-walls, all and severally marked by the letter g.

The described decrease in the pitch of the spirally running flange of the rotating-shaft F, substantially as has been explained, and
 90 as is shown, obviously serves to secure a gradually increasing effect of compression or pressure on the peat in the rotating-shell N
 95 as it is being forced or is worked down through the combined action of the spiral-flanges of both said shaft and said shell, but, however, the pitch of the shaft-flange may be uniform throughout the length of the
 100 flange, without departing from the principles of this invention. Again the stationary-shell W may be divided into more or less separated sections, with perforated floors U
 105 as has been explained, or it may be one continuous chamber, from end to end, and the several perforated floors U may be dispensed with, but a combination of sections separated from each other by perforated partitions or floors, and each section having a set
 110 of rotating-arms or wings, and a set of cutting-blades all substantially as has been described and as is shown, secures most satisfactory results and is most efficient and advantageous. Again, while it is preferable to
 115 construct the stationary-shell W in sections, detachably attached together as described, or otherwise suitably, it is not essential that it should be so constructed.

Arranging the frictional pinion C² so as to
 120 be adjusted on its driving-shaft G in its bearing on the frictional-gear D² nearer to or farther from the axis of rotation of said gear D², enables the swinging movement of the knife-blade F² to be regulated to suit the discharge of the peat, which has been prepared
 125 in the machine, at the discharging-end X² of the spout X as also to secure the severing or cutting of it into blocks or cakes of greater or lesser thickness, for the reason that by a
 130

proper adjustment, as aforesaid, of said frictional-bearing between the frictional-pinion and frictional-gear, the rotation of the knife-blade F^2 can be thereby comparatively made
5 more or less quick, or more or less slow, as the case may be.

Although the apparatus of this invention has been shown and described as vertically constructed and arranged in its several parts,
10 it may be horizontally similarly constructed and arranged without effecting its efficiency, or the method or manner of its operation as has been herein explained for it when in a vertical position.

15 From the description which has been given, it is obvious that the action of the apparatus on peat to prepare it for use as fuel embraces a feed, disintegration and compressing of peat in and by one continuous manipulation thereof and severally substantially
20 simultaneously with each other.

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

25 1. In a machine or apparatus for preparing peat for use as fuel, the combination of a spirally-flanged and rotatable shaft, and an interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite
30 to that of the other, and the shaft arranged within and axially coincident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation
35 of the shaft and shell.

2. In a machine or apparatus for preparing peat for use as fuel, the combination of a spirally-flanged and rotatable-shaft having its spiral increasing in pitch from one end-
40 portion toward its opposite end-portion, and an interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of
45 the shell and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell.

3. In a machine or apparatus for preparing peat for use as fuel, a spirally-flanged and rotatable-shaft, an interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident
55 with the axis of the shell and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary-hopper in
60 communication with one end of said shell and having said rotatable-shaft in part axially contained therein.

4. In a machine or apparatus for preparing peat for use as fuel, a spirally-flanged
65 and rotatable-shaft, and interiorly spirally-

flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell and the outer edges of the flanges of the shaft and
70 those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary-hopper in communication with one end of said shell and having said rotatable-
75 shaft in part axially contained therein, and its side-walls grooved and ribbed along its length.

5. In a machine or apparatus for preparing peat for use as fuel, a spirally-flanged
80 and rotatable-shaft, an interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell and the
85 outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-plate at and across an
90 open end of said shell, and a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate.

6. In a machine or apparatus for preparing
95 peat for use as fuel, a spirally-flanged and rotatable-shaft, and interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially co-
100 incident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a station-
105 ary-hopper in communication with an open end of said shell and having said rotatable shaft in part axially contained therein, a stationary perforated plate at and across an open end of said shell opposite to said station-
110 ary-hopper and a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate.

7. In a machine or apparatus for prepar-
115 ing peat for use as fuel, a spirally-flanged rotatable-shaft, and interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident
120 with the axis of the shell and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-
125 plate at and across one open end of said shell, a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate, a stationary-shell extending outside of, and be-
130

yond and axially-coincident with said rotatable-shaft, a stationary perforated-plate at the further end of said stationary-shell, and an axial rotatable-shaft continuous with said spirally flanged-shaft and crossing between and turning in said perforated plates and having wings or blades spirally arranged thereon and rotating therewith.

8. In a machine or apparatus for preparing peat for use as a fuel, a spirally-flanged rotatable-shaft, an interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-plate at and across one open end of said shell, a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate, a stationary-shell extending outside of and beyond and axially coincident with said perforated plate, a stationary perforated-plate at the further end of said stationary-shell, and an axial rotatable-shaft continuous with said spirally flanged-shaft and crossing between and turning in said perforated-plates and having radial-wings or blades spirally arranged thereon and rotating therewith, and also a radial-cutting-blade arranged to move across the inner open ends of the perforations of said plate which are at the further end of said stationary-shell.

9. In a machine or apparatus for preparing peat for use as a fuel, a spirally flanged rotatable-shaft, an interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-plate at and across one open end of said shell, a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate, a stationary-shell extending outside of and beyond and axially coincident with said perforated plate, and having ribs or grooves extending along the length of its internal wall, a stationary perforated-plate at the farther end of said stationary-shell, and an axial rotatable-shaft continuous with said spirally flanged-shaft and crossing between and turning in said perforated-plates and having radial-wings or blades spirally arranged thereon and rotating therewith, and also a radial cutting-blade arranged to move across the inner open ends of the perforations of said

plate which is at the further end of said stationary-shell.

10. In a machine or apparatus for preparing peat for use as a fuel, a spirally-flanged rotatable-shaft, an interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-plate at and across one open end of said shell, a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate, a stationary-shell extending outside of and beyond and axially coincident with said perforated-plate, and divided along its length into sections detachably attached together, a stationary perforated-plate at the further end of each section of said stationary-shell, and axial rotatable-shaft continuous with said spirally flanged-shaft and crossing between and turning in said perforated-plates and in each of its said sections having radial-wings or blades spirally arranged thereon and rotating therewith, and also a radial cutting-blade arranged to move across the inner open ends of the perforations of said plate which is at the further end of each section of said stationary-shell.

11. In a machine or apparatus for preparing peat for use as a fuel, a spirally-flanged rotatable-shaft, and interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-plate at and across one open end of said shell, a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate, a stationary-shell extending outside of and beyond and axially coincident with said perforated-plate, a stationary perforated-plate at the further end of said stationary-shell, an axial rotatable-shaft continuous with said spirally flanged-shaft and crossing between and turning in said perforated-plates and having radial-wings or blades spirally arranged thereon and rotating therewith, and also a radial cutting-blade arranged to move across the inner open ends of the perforations of said plate which is at the further end of said stationary-shell, and a spout leading from the discharging end of said stationary-shell which is contracted in its transverse area from end to end.

12. In a machine or apparatus for preparing peat for use as a fuel, a spirally-flanged rotatable-shaft, and interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-plate at and across one open end of said shell, a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate, a stationary-shell extending outside of and beyond and axially coincident with said perforated-plate, a stationary perforated-plate at the further end of said stationary-shell, an axial rotatable-shaft continuous with said spirally-flanged shaft and crossing between and turning in said perforated-plates and having radial-wings or blades spirally arranged thereon and rotating therewith, and also a radial cutting-blade arranged to move across the inner open ends of the perforations of said plate which is at the further end of said stationary-shell, and means arranged to sever the peat as it is discharged into separate cakes or blocks.

13. In a machine or apparatus for preparing peat for use as a fuel, a spirally-flanged rotatable-shaft, and interiorly spirally-flanged and rotatable-shell, the one rotating in a direction opposite to that of the other, and the shaft arranged within and axially coincident with the axis of the shell, and the outer edges of the flanges of the shaft and those of the flanges of the shell adapted to pass by each other in the rotation of the shaft and shell, in combination with a stationary perforated-plate at and across one

open end of said shell, a cutting-blade carried by said rotatable-shaft and arranged to move across the inner open ends of the perforations of said plate, a stationary-shell extending outside of and beyond and axially coincident with said perforated-plate, a stationary perforated-plate at the further end of said stationary-shell, an axial rotatable-shaft continuous with said spirally flanged-shaft and crossing between and turning in said perforated-plates and having radial-wings or blades spirally arranged thereon and rotating therewith, and also a radial cutting-blade arranged to move across the inner open ends of the perforations of said plate which is at the further end of said stationary-shell, a spout leading from the discharging end of said stationary-shell which is contracted in its transverse area from end to end, and means arranged at the discharging end of said spout to sever the peat, as it is discharged, into separate cakes or blocks.

14. In a machine or apparatus for preparing peat for use as a fuel and having means for feeding, mixing, disintegrating, pressing and compressing the peat, the combination with the delivery of said so prepared peat from the machine, of means consisting of a continuously rotating cutting-blade for severing the peat as it is delivered, arranged to operate at intervals thereon, and thereby to divide it into separate cakes or blocks, and means for operating said blade arranged for adjustment to vary the speed of rotation of said cutting-blade.

In witness whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

MATTHEW C. SHARPNECK.

Witnesses:

ALBERT W. BROWN,
LESTER L. FOBES.