

No. 663,568.

Patented Dec. 11, 1900.

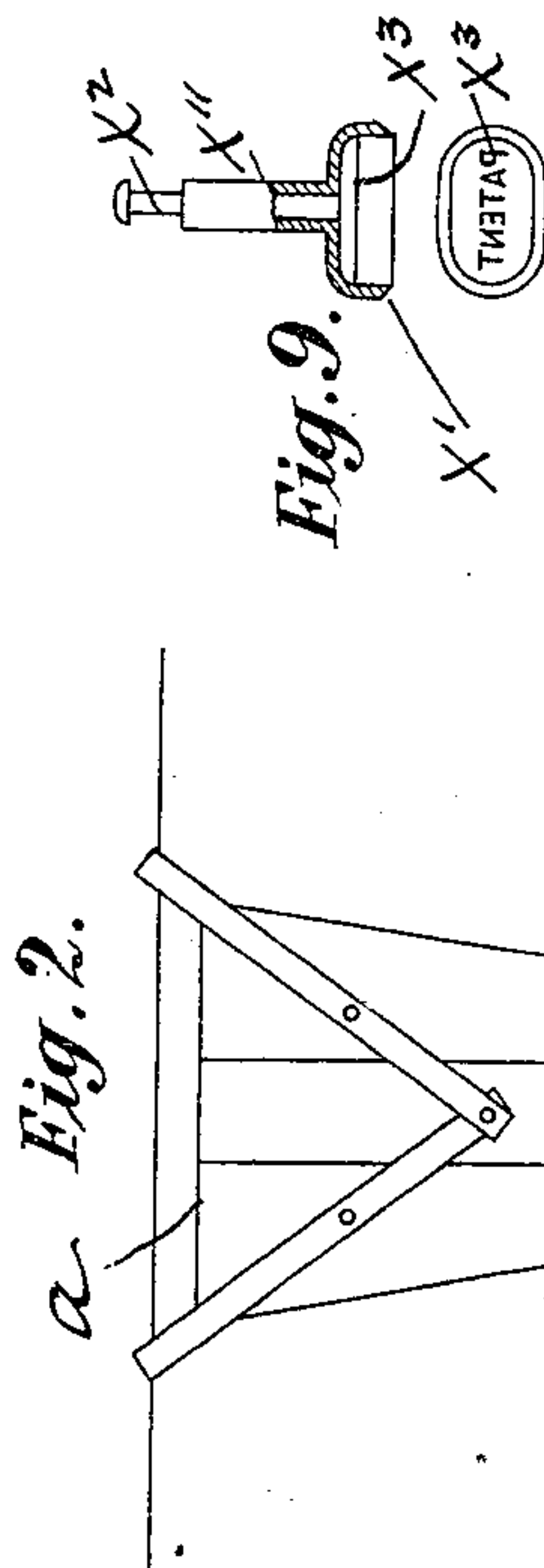
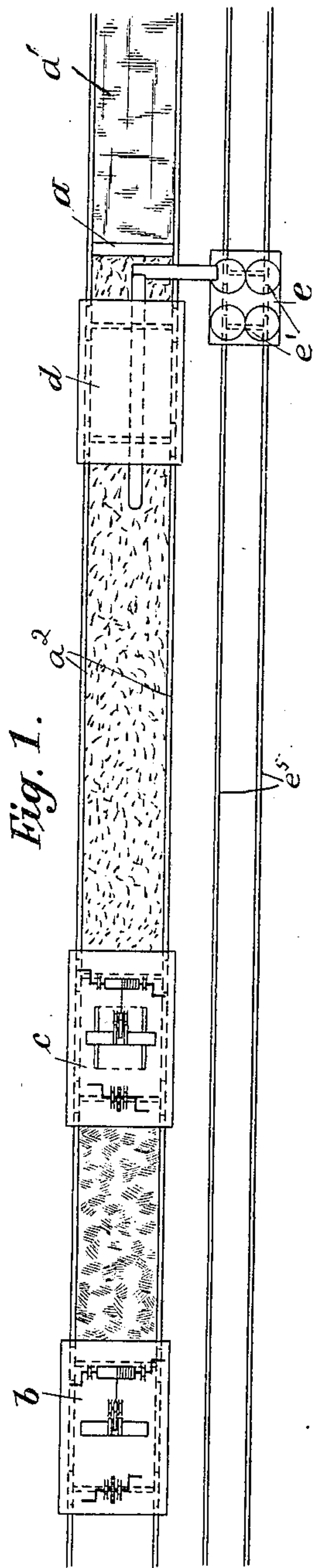
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PROCESS OF WORKING PEAT AND MANUFACTURING SAME INTO BRIQUETS.

(Application filed July 18, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES
Ella L. Giles
O. M. Munn

INVENTOR
Ladislaus Galecki
BY
Richardson
ATTORNEYS

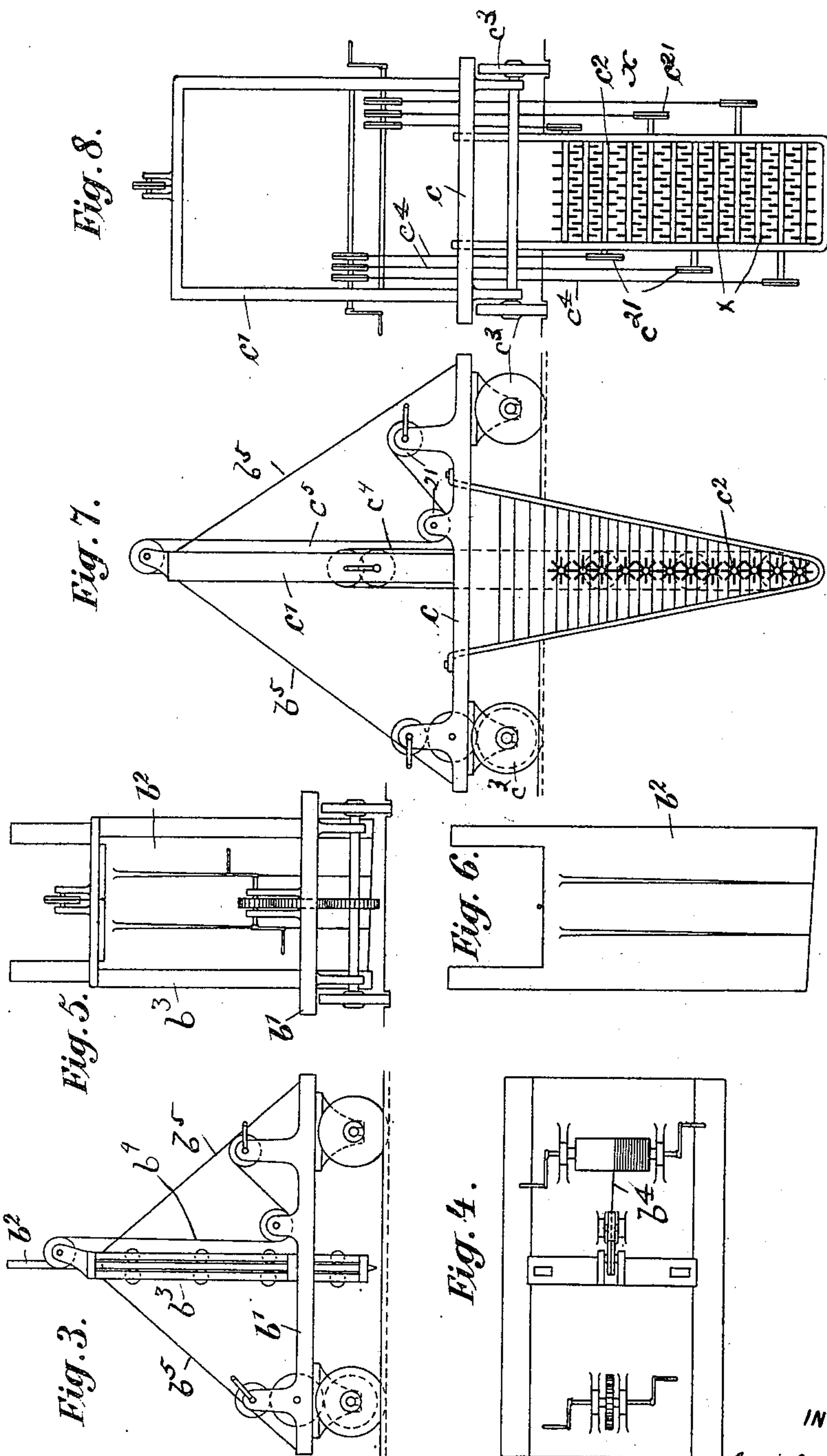
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Ladislav Galecki
BY
Richard R.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

LADISLAUS GALECKI, OF WARSAW, RUSSIA.

PROCESS OF WORKING PEAT AND MANUFACTURING SAME INTO BRIQUETS.

SPECIFICATION forming part of Letters Patent No. 663,568, dated December 11, 1900.

Application filed July 18, 1899. Serial No. 724,257. (No specimens.)

To all whom it may concern:

Be it known that I, LADISLAUS GALECKI, a subject of the Czar of Russia, and a resident of Warsaw, in the Grand Duchy of Warsaw, Russia, have invented certain new and useful Improvements in the Process of Working Peat and Manufacturing the Same into Briquets, of which the following is a specification.

10 This invention has for its object a process for the extraction of peat and the manufacture of peat briquets.

This process consists in successively dividing or cutting the peat mass and treating it in the bog in such a manner as to produce a thoroughly homogeneous mass, the latter being subsequently freed by mechanical means from foreign bodies—such as sand, clay, and the like—which impair its heating power. 20 The peat mass subjected thus to a preliminary treatment is eminently fit to form peat briquets of extraordinary heating power without the use of heavy machinery, such as briquet-presses.

25 In order that my said invention may be particularly described and ascertained, reference is hereby made to the accompanying drawings, in which similar letters of reference indicate corresponding parts.

30 Figure 1 is a diagram showing the manner of carrying the process into practice—that is to say, it illustrates the plant necessary for this purpose. Fig. 2 is a front view of the weir. Fig. 3 is a side view of the machine for cutting the peat. Fig. 4 is a plan, and Fig. 5 an end, elevation of the same. Fig. 6 35 is a detail view of the cutting-knife. Fig. 7 is a side view of the mixing-machine, and Fig. 8 a front view of the same. Fig. 9 shows the cutter for dividing the peat into briquets and also the stamp.

40 According to my invention I lay parallel rails across the bog, upon which the various machines travel as they are operated to break up and remove the peat in the manner hereinafter described, the portion of peat removed forming a canal. By means of a removable weir a , Figs. 1 and 2, the arrangement of which may be obviously suited to the circumstances of the case, the peat which has 45 been subjected to the action of the mixing-machine is prevented from passing back into

the excavated portion or canal a' . On both sides of the latter are placed rails a^2 , along which the various machines arranged above 55 such gallery or canal can travel. The cutting-machine b cuts up the peat in vertical sections or layers, which are turned over or otherwise broken up. This cutting-machine, which may be of any suitable construction, 60 may be made as illustrated in Figs. 3, 4, 5, and 6. The same consists of a traveling platform b' and a frame b^3 , upon which is mounted a cutting appliance b^2 , of the same width as the peat-canal and capable of rising and 65 falling. This cutter b^2 is made of any suitable material, but preferably of non-oxidizable metal, and actuated by chains or ropes b^4 . Its lower end is sharpened to facilitate the cutting or slicing operation. Fig. 6 shows 70 the form of this cutting appliance b^2 . The peat layers disengaged by the cutting-machine are subsequently operated upon by a mixing-machine, which reduces them into homogeneous pulp or paste. This mixing-machine 75 may likewise be of any suitable construction. Figs. 7 and 8 illustrate such a machine which is particularly adapted for the purpose. This mixing-machine consists of a platform c , mounted on wheels c^3 and fitted 80 with a suitable frame c' for effecting the up-and-down motion of the mixing-rollers c^2 . These rollers consist of a number of shafts fitted with teeth, as shown, the teeth of one roller being arranged so as to pass between 85 the teeth of the adjoining roller. Suitable stays b^5 may be used to brace the frame b^3 , Fig. 3, and also the frame c' of Fig. 7. The up-and-down movement to the rollers c^2 may be given by a rope c^5 and chain-wheels 21. These 90 rollers are actuated from the platform by means of chains c^4 and chain-wheels c^{21} in any suitable manner. Between each pair of movable rollers there is arranged one fixed shaft, which cannot turn, as shown at x in Fig. 8. 95 As the mixing-rollers are set in operation the peat after being operated on by the cutting-machine is seized and worked into a uniform mass, which is propelled by the rollers of the mixing-machine onto the rear end of 100 the peat-canal. The cutting-machine and the mixing-machine may be moved along the rails e^5 in any desired manner.

Behind the mixing-machine there gradually

accumulates in the peat-canal a peat pulp of thoroughly uniform consistence. This peat pulp is raised out of the said canal by an elevator *d* of any suitable construction and
5 dropped into casks or barrels *e'*, placed upon a truck *e*, moving upon rails arranged alongside the peat-canal in order to convey this peat mass to the works or elsewhere. From these casks the peat is taken and filtered in
10 any suitable filtering apparatus, and when sufficiently hardened is cut into briquets, preferably by a cutter *x'*, as shown in Fig. 9, having a tubular neck *x''*, in which is carried handle *x²*, terminating in a stamp *x³*. In this
15 manner the peat is continuously raised out of the peat bog in the form of a homogeneous mass and is converted into briquets.

Having now particularly described and as-

certained the nature of my said invention and in what manner the same is to be performed, 20 I declare that what I claim is—

The herein-described process of working peat which consists in cutting or dividing up the peat while in the bog, thoroughly agitating or mixing the divided mass while still in 25 the bog, removing the agitated mass and filtering the same, molding the filtered material into briquets, and finally drying the same, substantially as described.

In witness whereof I have hereunto set my 30 hand in presence of two witnesses.

LADISLAUS GALECKI. [L. S.]

Witnesses:

BOLERTAW HORODQUIST,
KAROT BOYDAW.