(No Model.) 2 Sheets—Sheet 1.

A. OEHLER.

MACHINE FOR MIXING MORTAR.

No. 535,170. Patented Mar. 5, 1895.

Fig. 1.

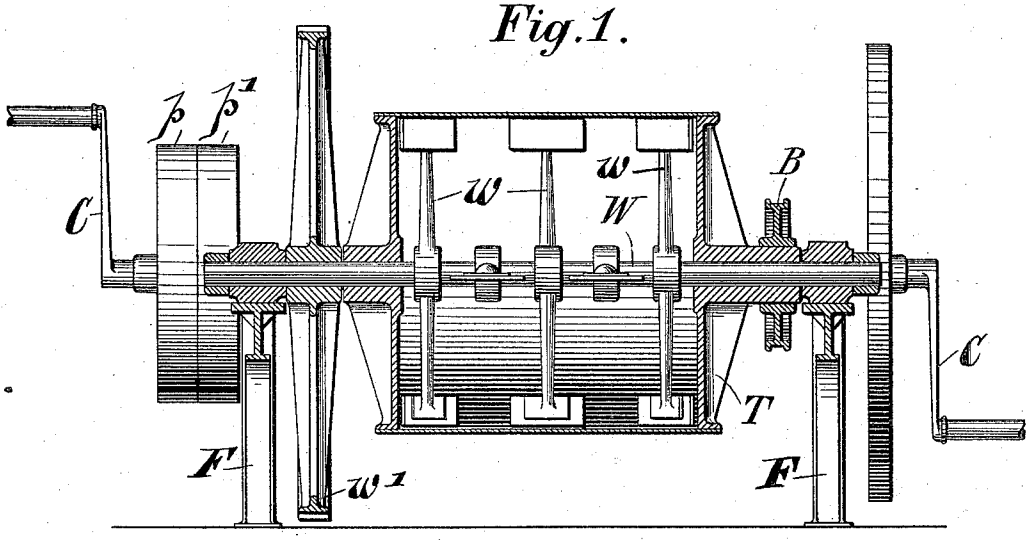
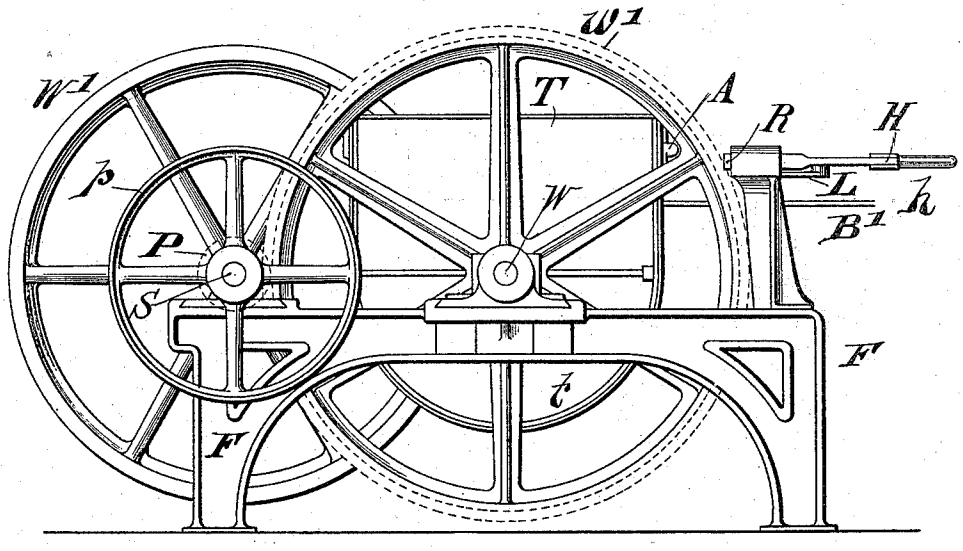


Fig. 2.



Witnesses:
H. G. Dieterich
Henry Orth

Inventor:
Alfred Oehler.
by Henry Orth
Atty.

(No Model.) 2 Sheets—Sheet 2.

A. OEHLER.

MACHINE FOR MIXING MORTAR.

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Fig. 3.

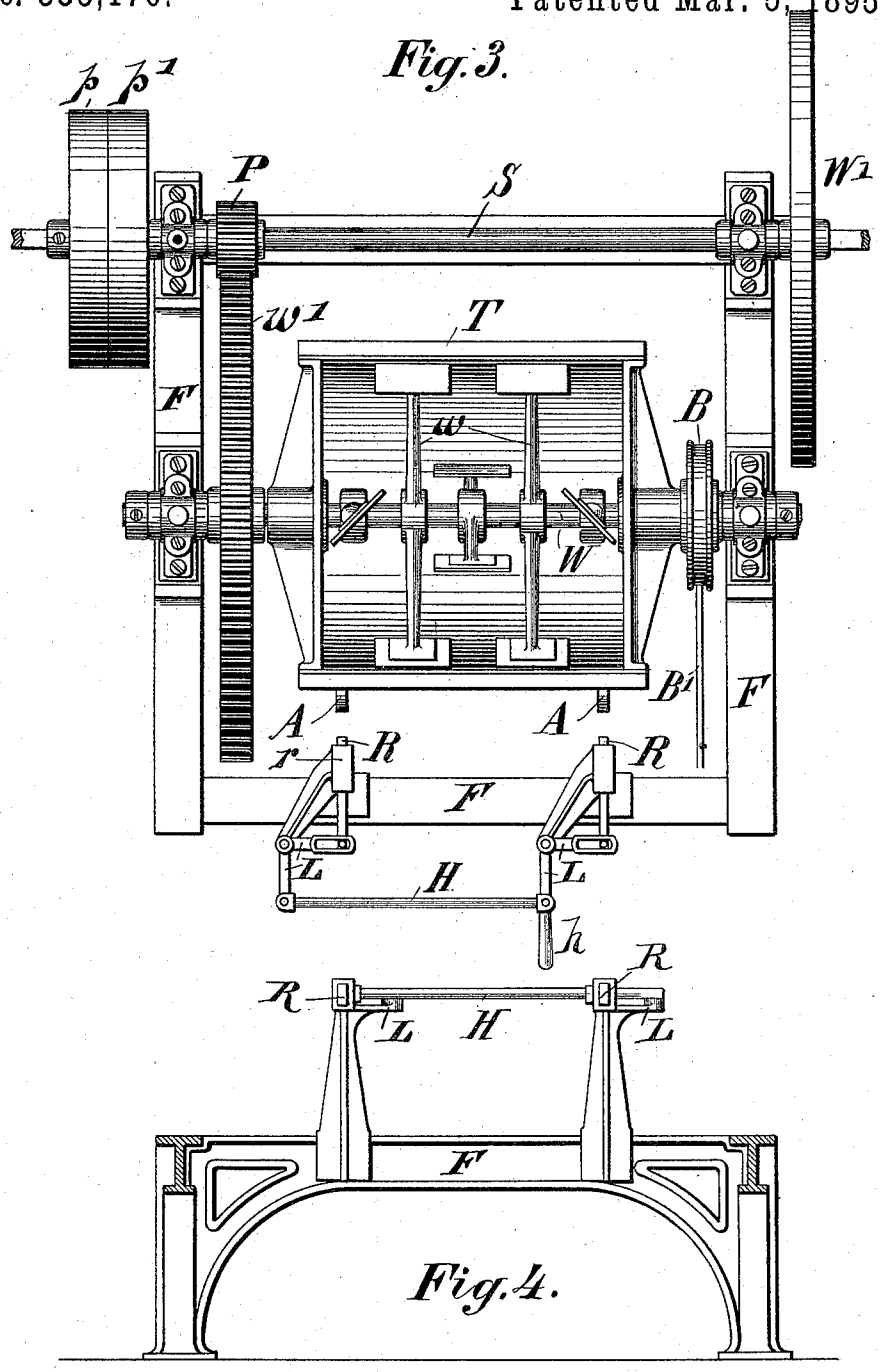

Fig. 4.

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UNITED STATES PATENT OFFICE.

ALFRED OEHLER, OF AARAU, SWITZERLAND, ASSIGNOR TO THE FIRM OF P. AMMANN, OF MÖDLING, AUSTRIA-HUNGARY.

MACHINE FOR MIXING MORTAR.

SPECIFICATION forming part of Letters Patent No. 535,170, dated March 5, 1895.

Application filed July 11, 1894. Serial No. 517,224. (No model.) Patented in Switzerland February 6, 1893, No. 5,954; in France February 11, 1893, No. 227,836; in Italy February 28, 1893, No. 33,523, and in Austria-Hungary August 28, 1893, No. 10,238 and No. 34,236.

To all whom it may concern:

Be it known that I, ALFRED OEHLER, a citizen of the Republic of Switzerland, residing at Aarau, in the Republic of Switzerland, have invented certain new and useful Improvements in Machines for Mixing Mortar, (for which I have obtained patents in Switzerland, No. 5,954, dated February 6, 1893; in France, No. 227,836, dated February 11, 1893; in Italy, Reg. Gen., No. 33,523, dated February 28, 1893, and in Austria-Hungary, Reg. No. 10,238 and No. 34,236, dated August 28, 1893,) of which the following is a specification.

My invention has relation to machines designed for mixing together different substances or materials, or for converting substances or materials into a plastic form by the admixture therewith of a suitable fluid, and it has for its object the provision of means for automatically dumping the contents of the mixing vessel, as will now be fully described, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal vertical sectional view; Fig. 2, a left end elevation, and Fig. 3 a top plan view of a machine embodying my invention. Fig. 4 is a detail elevation of the locking devices for locking the mixing vessel against rotation.

Upon a shaft W is mounted a vessel T so as to revolve therewith by frictional contact. Said vessel is preferably constructed in the form of a trough provided with a substantially semi-cylindrical bottom *t*. The shaft W has its bearings in a suitable framing F, and carries besides the stirrers or mixing paddles or shovels *w* within the vessel, a gear wheel *w'* that meshes with a pinion P on a counter shaft S, which last named shaft may be revolved by hand through the medium of a crank or cranks C, Fig. 1, or said shaft may be belted to any suitable prime motor, for which purpose it will be provided with the usual fast and loose belt pulleys *p p'*, a fly wheel W' being also secured to said shaft S.

The vessel T is open at top and is provided along one of its edges with two lugs A, A, projecting therefrom, and upon one of the hubs of said vessel is secured a brake wheel B adapted to be operated in any usual or well known manner by means of a brake lever B'.

The vessel T is held against rotation with its shaft W by means of two bolts, R, R, adapted to be projected over or under the lugs A, as the case may be, said bolts working in sleeves *r* secured to the framing F, and are connected to bell crank levers, L, L, said bolts being provided with a lug *r'* projecting laterally therefrom into a slot in one of the arms of said levers L, both levers being connected by a rod H, and are simultaneously operated by means of a handle *h*, formed on one of the lever arms, as clearly shown in Fig. 3.

It is obvious that when the handle *h* is moved from left to right (Fig. 3) the bolts R will be moved out of their guide sleeves in the path of the lugs A and thereby hold the vessel T against rotation with its shaft W.

Whenever it is desired to dump the contents of the aforesaid vessel, the locking bolts are withdrawn and the vessel is allowed to revolve with its shaft until it reaches a position the reverse of that shown in Figs. 1 and 3, that is to say, until it is upside down, when the brake is brought into operation, and the rotation of the vessel with its shaft is arrested, thereby emptying said vessel.

In case the contents of the vessel are of a more or less plastic nature the stirrers or mixing devices *w* assist in the removal of such contents, inasmuch as the shaft W continues to revolve after the vessel has been turned upside down.

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

In a mixing machine, the combination with an open top vessel provided with a concave bottom, with tubular journals and with two lugs A, A, a revoluble shaft passing loosely through the journals of the vessel and having stirrer or mixing arms within such vessel, and a fixed frame in which said shaft has its bearings, of two locking bolts R each connected with one arm of a bell crank lever, a connecting rod connected with the other arm

of said levers, and a hand lever rigidly connected with one of the bell crank levers, a brake wheel or disk on one of the journals of the vessel and a friction device adapted to act upon said brake wheel, substantially as and for the purpose set forth.

In testimony whereof I hereunto sign my name, in the presence of two subscribing witnesses, this 14th day of June, 1894.

ALFRED OEHLER.

Witnesses:
S. GROLIMANN,
HCH. BOLLIGER.