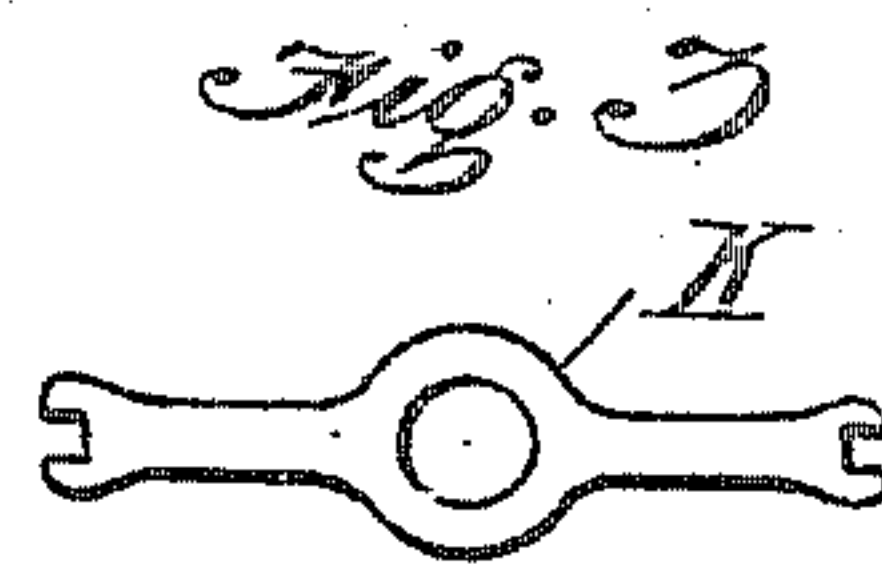
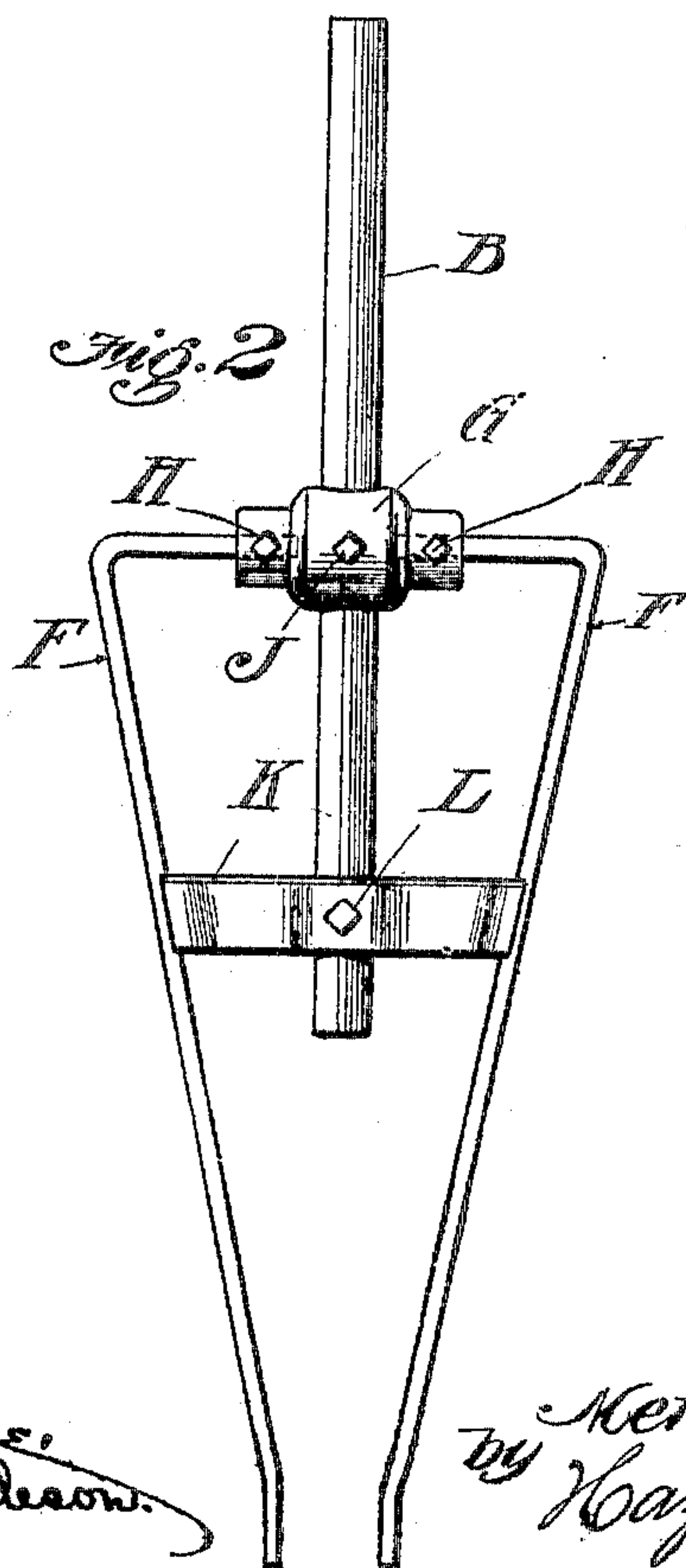
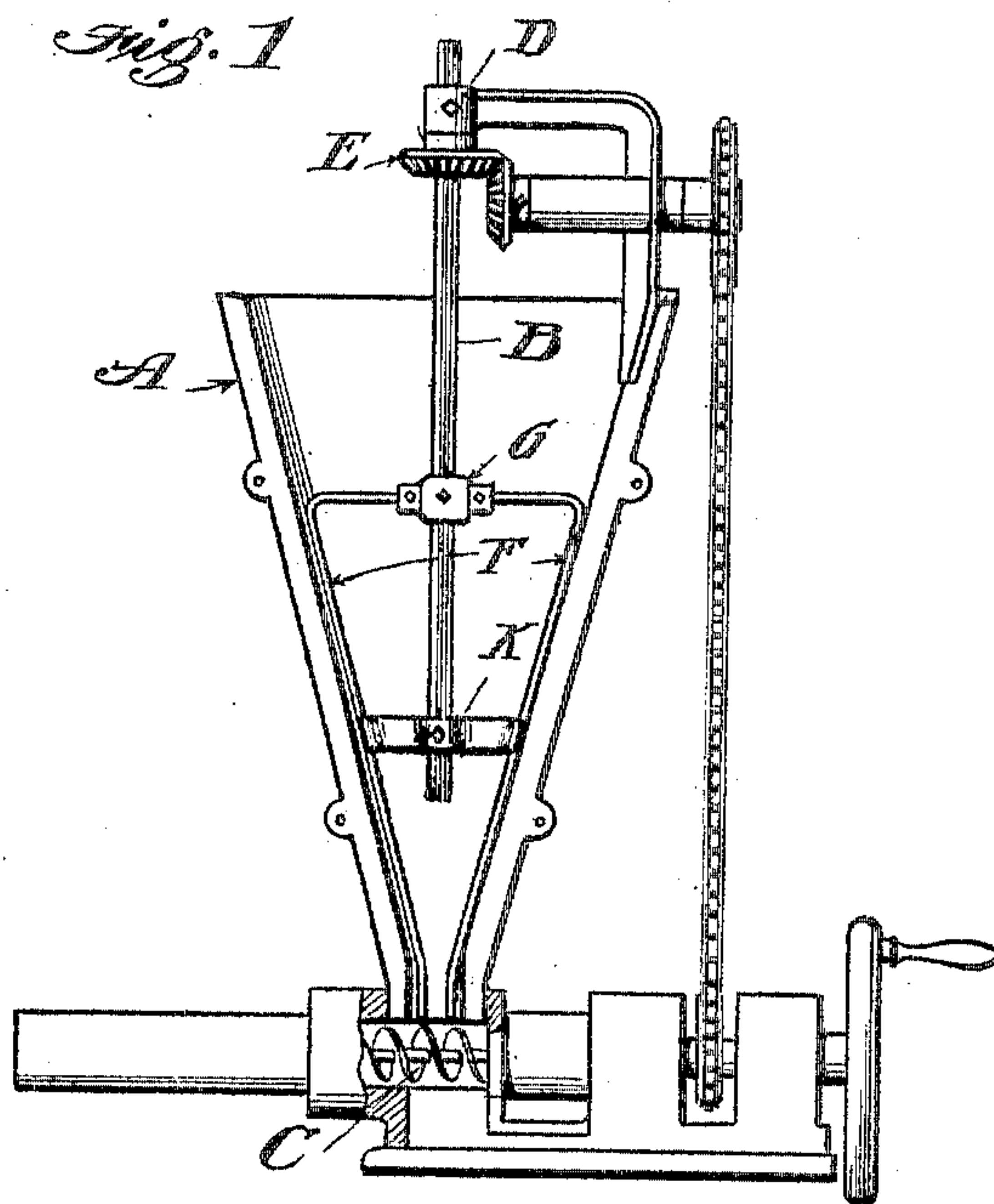


No. 797,721.

PATENTED AUG. 22, 1905

M. J. COVELL.
AGITATOR FOR CORE MAKING MACHINES.
APPLICATION FILED APR. 12, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

MERRITT J. COVELL, OF LOS ANGELES, CALIFORNIA.

AGITATOR FOR CORE-MAKING MACHINES.

No. 797,721.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed April 12, 1905. Serial No. 255,253.

To all whom it may concern:

Be it known that I, MERRITT J. COVELL, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Agitators for Core-Making Machines, of which the following is a specification.

The object of my invention is to provide simple and reliable means to feed the material out of which cores are made to the feed-screw and to prevent this material from sticking to the inside of the hopper while the core-making machine is in operation. I accomplish these objects by means of the device described herein and shown in the accompanying drawings, in which—

Figure 1 is an elevation of a core-making machine with my agitator in place therein, the hopper and other parts of the machine being shown in central vertical section. Fig. 2 is an elevation of my improved agitator removed from the machine. Fig. 3 is a plan of the spreader.

In the drawings, A represents the hopper, of any conventional type of core-making machine, operated in any conventional way, whereby the operating-shaft B is caused to rotate. In the conventional core-making machine this shaft carries upon its lower end an auger to press the core-making material downwardly into the feed-screw C, which forms the core; but it has been found that this means of feeding the prepared sand to the screw is not satisfactory, owing to the fact that the composition of which sand forms a larger part is more or less mucilaginous and the auger fails to feed it to the core-making screw C. To remedy this, I have provided an agitator for placement in a core-making machine of the type illustrated in the drawings.

The vertical operating-shaft B, to which the agitator is keyed, as at D, carries the usual miter-gear E, keyed to the upper part of the shaft and by means of which rotation is imparted to the shaft. My agitator proper consists of two downwardly-projecting agitator-arms F, adjustably secured to the cross-head G by means of the set-screws H. This cross-head is adjustably secured on the vertical shaft by the set-screw J. The downwardly-projecting agitator-arms are arranged to fit the interior of the cone-shaped hopper A. To adjustably spread these downwardly-projecting agitator-arms, I have

mounted on the lower end of the operating-shaft the spreader K, adjustably secured on the operating-shaft by the set-screw L. By means of the set-screws J in the cross-head and L in the spreader I am enabled to cause the spring-arms F to closely fit against the inner side of the hopper, and upon the rotation of the operating-shaft, which will carry with it the agitator, the contents of the hopper will be prevented from sticking to the inside of the hopper, and the result has been that the core-sand is readily and reliably fed to the feeding-screw.

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

1. An agitator for core-making machines, comprising a rotatable shaft, a cross-head and spreader adjustably secured thereon, and arms adjustably secured to the cross-head, and laterally supported by the spreader.

2. An agitator for core-making machines, comprising a shaft, a cross-head, arms secured thereon, and a spreader adjustably secured to the shaft and having loose sliding connection with the arms whereby its adjustments up and down on the shaft will cause lateral adjustment of the arms.

3. An agitator for core-making machines, comprising a shaft, a cross-head thereon, spring-arms secured at their upper ends to the outer ends of the cross-head, and a spreader secured to the shaft between the arms, said spreader regulating the position of the free ends of the arms with respect to each other.

4. An agitator for core-making machines comprising a shaft, a cross-head thereon, spring-arms adjustably secured to the cross-head and a spreader adjustably secured to the shaft and bearing against the spring-arms, whereby to force their free ends apart or admit of their springing toward each other.

5. The combination with a hopper and a rotatable shaft, of adjustable arms secured to the shaft, and a spreader adjustably secured to the shaft and forked at its outer end to receive the arms whereby to support them laterally and to regulate their position with respect to the wall of the hopper.

6. The herein-described agitator for core-making machines comprising the vertical operating-shaft B provided with means for its rotation as shown; downwardly-projecting agitator-arms F adjustably mounted in the

cross-head G and having on the lower end thereof a spreader adjustably mounted on the operating-shaft and adapted to give the downwardly - projecting agitator - arms the necessary inclination to fit the inside of the hopper A, substantially as herein shown and described.

In witness that I claim the foregoing I have hereunto subscribed my name this 6th day of April, 1905.

MERRITT J. COVELL.

Witnesses:

MYRTLE A. JONES,
G. E. HARPHAM.