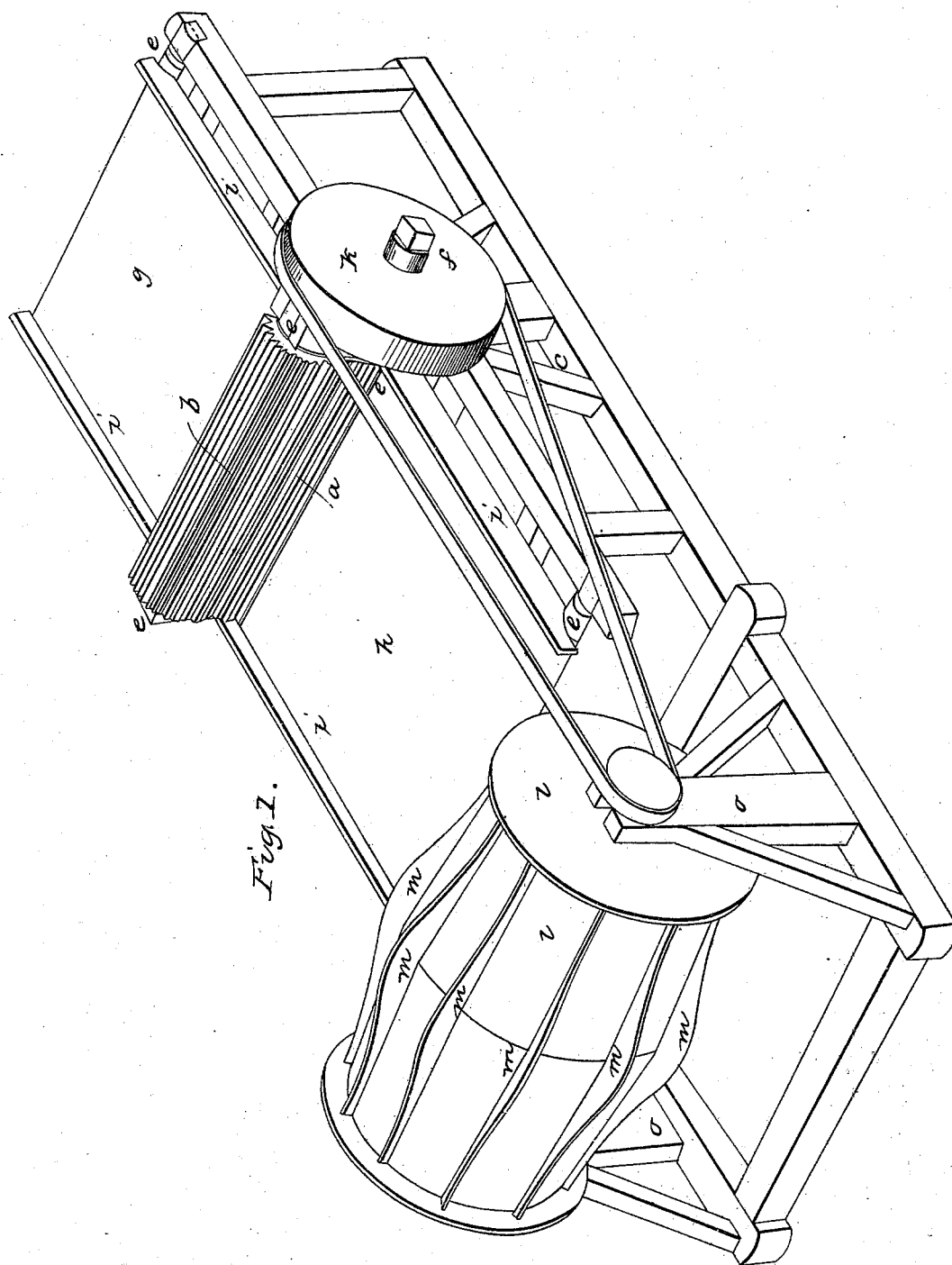


TATE & ENGLISH.

Hemp Brake.

No. 2,717.

Patented July 11, 1842.



UNITED STATES PATENT OFFICE.

GEO. T. TATE AND WM. ENGLISH, OF FRANKFORD, MISSOURI.

IMPROVEMENT IN MACHINES FOR BREAKING AND CLEANING HEMP.

Specification forming part of Letters Patent No. 2,717, dated July 11, 1842.

To all whom it may concern:

Be it known that we, GEO. T. TATE and WM. ENGLISH, of Frankford, in the county of Pike and State of Missouri, have invented a new and useful Improvement in Breaking and Cleaning Hemp, the following being a full, clear, and exact description thereof, in which reference is made to the accompanying drawings, making a part of this specification.

The nature of our invention consists in making the beaters by which the shives, &c., are to be beaten out of the hemp with a swell in the middle of their length, and having them project from the surface of a cylindrical or other formed drum, by which peculiarity of form the shives of hemp are immediately spread over the whole length of the beaters, thus greatly facilitating the operation of cleaning, whereas when the beaters are straight, as heretofore made, the hemp, when presented to the beaters, is not spread by the operation of the beaters, and hence requires much attention from the person who feeds and tends the machine.

This machine consists of two grooved rollers, *a* and *b*, placed one above the other on a suitable frame. Two endless aprons are placed one on each side of the rollers. The feeding-apron *g* introduces the hemp between the grooved rollers and the other (marked *h*) serves to carry the broken hemp off. The aprons pass around rollers *e*, which are driven by bands that connect them with the grooved rollers *a*. On the shaft *f* of this roller, outside the frame, is the driving-pulley *k*. The cleaner *l* is formed of two truncated cones, the bases of which are joined, it being largest in the center and gradually tapering toward each end. The gudgeons of this cleaner are supported by the upright posts *o*, which are firm-

ly braced, and may be attached to the frame of the brake. Upon the periphery of this cleaner are eight equidistant beaters, *m*, projecting from the surface at the ends about two and one-half inches, and at the center rising up to about four inches. The edges of the beaters are rounded, to prevent injuring the hemp in cleaning, and at each end of the cleaner a flange projects up to prevent the hemp from falling over the ends. This machine is driven by a pulley on its shaft, which is connected by a band to the pulley *k* on the brake. When the cleaner is put in operation, the hemp is taken from the apron *h* and held by one end on the cleaner, which should revolve very rapidly. The form of the beaters tends to spread the hemp on the cleaner, and the shives are instantly separated from it. The ends are then reversed and the hemp is in the state to be packed for market.

We are aware that machines have been made for the purpose of cleaning hemp by means of revolving beaters; but heretofore these have been made straight. We do not, therefore, claim simply the employment of beaters; but

What we do claim as our invention, and desire to secure by Letters Patent, is—

The peculiar manner in which we have constructed the cleaner—that is to say, we claim the making of the beaters that project from the surface of the drum of the cleaner with a swell in the middle of their length, by which the hemp will be spread uniformly over the beaters, as described.

GEORGE T. TATE.
WILLIAM ENGLISH.

Witnesses:

GABRIEL PHILLIPS,
JOHN G. SHIELDS.