(1) In a gig mill, the combination, with a rotary drum consisting of heads, a shaft, and a series of card or teaseling rollers journaled upon said heads and provided with pulleys at their projecting ends, of a driving belt applied to each set of said pulleys, and devices, substantially as described, for driving said belts with varying speeds and in different directions as described, whereby the cards are rotated simultaneously each about its own axis and about the axis of the drum, substantially as described.

(2) In a gig mill, the combination, with a drum composed of heads, a shaft, and the working card or teaseling rollers D D, of a shaft I, cones H H', belt X<sup> $\circ$ </sup>, pinion f, gear d, pulleys F F', belts X X', and pulleys a a, substantially as described.

(3) In a gig mill, the combination, with a drum composed of teaseling cards or working rollers D D, heads, and a shaft, of pulleys a a at the projecting ends of said rollers and of greater diameter than the rollers, a driving belt in operative relation to each set of pulleys, and devices, substantially as described, for driving said belts with varying speeds and in different directions, substantially as described.

As in the case of Heap v. Greene (this day decided) 75 Fed. 405, I find a clear statement of the mechanical differences here in question impracticable without several illustrations which are not at my command for use in this place; and therefore, without deciding the question of the validity of the patent, I find that the claims here disputed are so limited by the English patent to William Davis (No. 4,820), of July 24, 1823, and the German patent to Moritz Jahr (No. 4,949), of September 1, 1878, as well as by the state of the art generally that the respondent cannot be held to infringe. The bill will be dismissed with costs.

## MULLEN et al. v. KING DRILL CO. et al.

## (Circuit Court, D. Indiana. July 22, 1896.)

PATENTS-VALIDITY AND INFRINGEMENT-GRAIN DRILLS.

The Mullen patent, No. 355,462, for an improvement in grain drills, designed for the special purpose of drilling seed between rows of standing corn, *held* valid, and infringed as to claims 1 and 2.

This was a suit in equity by Winfield W. Mullen and others against the King Drill Company and others for alleged infringement of a patent.

Chester Bradford, for complainants. Coburn & Strong, for defendants.

BAKER, District Judge. This is a suit in equity, in the usual form, for infringement of letters patent No. 355,462, issued January 4, 1887, to Winfield W. Mullen and Francis M. Mullen, two of the complainants, for certain improvements in grain drills. The invention which forms the subject-matter of the patent is designed for the special purpose of drilling seed between rows of corn in the farming process known as "double cropping." It differs from ordinary grain drills, either adjustable or nonadjustable, in that its outer drill-teeth automatically follow the bases of the corn hills. In the specification it is said:

"This drill is mostly used where it is desired to sow grain between rows of corn, and its operation is as follows: The three central drill-teeth, being rig-

idly mounted on the frame, A, move directly forward, as the drill progresses through the field, in parallel lines; but the outer drill-teeth, being mounted on the spring-mounted wings, B, as they move along next the hills, will swing in and out, and accommodate themselves to the inequalities in the ground produced by such hills, and leave a line of seed which practically follows the bases of the hills of corn. By this means any tearing up of the hills of corn is avoided, and at the same time the grain is drilled very close to them, which is very desirable."

Only claims 1 and 2 are involved in this suit. They are as follows:

"(1) The combination, in a grain drill, of the main or central frame, A, the usual drill mechanism and drill-teeth, and the outer frame parts or wings, B, said wings being pivoted to the frame, A, with springs interposed between said wings and said frame. (2) The combination of the main frame, A, the usual seed-box and feeding mechanism, the spring-mounted wings, B, and spouts leading from the seed-box to the drill-teeth; the spouts which lead to the teeth on said wings being of a telescopic construction, substantially as set forth."

The defenses are want of invention as shown by the prior state of the art, anticipation as disclosed by certain prior patents, and noninfringement.

The patent is prima facie evidence of both novelty and utility, and neither of these presumptions has been rebutted by the evidence. On the contrary, they are strengthened. No anticipation of the complainants' combination is shown, although the attempt has been made to prove anticipation. The fact that it has been infringed is admitted by the defendants' expert, and its utility is sufficiently established as against the defendants by their infringement of it, as well as by direct proofs of utility found in the record. Let a decree be entered adjudging the validity and infringement of claims 1 and 2, with the usual injunction and reference for an accounting.

## O'CONNELL V. ONE THOUSAND AND TWO BALES OF SISAL HEMP.

(District Court, S. D. Alabama. March 20, 1896.)

## No. 743.

1. Admiralty Pleading-Amendments.

Amendments to the libel are allowable, in the discretion of the court, until the termination of the cause, and even in matters of substance: and an amended or supplemental libel may be allowed to stand as an original libel. But amendments are limited by due consideration of the rights of the opposite party, and will be denied if his rights would be prejudiced.

2. Shipping-Bills of Lading-Reference to Charter Party.

Acceptance of a bill of lading containing the words, "Freights and all other conditions as per charter party," brings into the contract, not only all conditions of the charter party which relate to the payment of freight, strictly so called, but all that are referable to the subject-matter of the receipt, the carriage, and the discharge of the cargo.

3. SAME—ALTERATION OF BILL OF LADING. A shipper has no right, without the master's consent, to strike from the bill of lading the clause, "Freight and all other conditions as per charter party."

This was a libel by William H. O'Connell, master of the steamship Ravensdale, against 1,002 bales of Sisal hemp, claimed by Thebaud