

Explanation of the movements of the improved cotton foot gin.

A A. Two perpendicular wheels. B the axis, on which is a crank C turned by a treadle D with the operator's foot. The wheels are each armed with a triple fly, loaded at the extremity of each arm with leaden weights of about 4 pounds each. E a leather strap, turns the collars F F of the two iron rollers, and for the purpose of turning them contrary ways, the strap on one side is reflected or twisted, and a small spindle G turning freely on its axis prevents the friction of the same. H H are two steel screws to regulate the distance which the rollers are to be apart. I is a moveable table with elevated sides on which the cotton is placed to be ginned, and resting on two arms K. This table in the back view of the machine is removed to shew a diagonal trough L, which receives the seed separated from the clean cotton. The cotton is extricated by the operator from the rollers, and falls over a platform placed on the braces M, and is received on a broad foot board N, in the front. O is a high seat on which the operator is seated. P, Q, are mortises in the upright shaft, in which are inserted metal collars for the axis B to run in, and are regulated by wedges, as shewn in the plate.

GIN, a machine to free cotton from seeds. At present we shall describe a foot gin in use in South Carolina, and of which a drawing has been procured through the friendship of a correspondent, who observes that "this gin differs from the common foot gins, in having iron instead of wooden rollers; it also works with greater ease, and its rollers appear to have twice the velocity of those in common use. The inventor asserts he can gin sixty-five pounds of cotton per day."

Plate 3.
Back View of a Cotton Gin

