M.H. Whiting, Carding Mach Tooth NO 107.842. Patented Sep. 27.1870, Fig1. Fig. 2. 2 Fry. 3 . Witnesses. John J. Peters_ Dames W. Clask.

UNITED STATES PATENT OFFICE.

WILLIAM H. WHITING, OF WILLINGTON, CONNECTICUT, ASSIGNOR TO HIMSELF AND MARCUS M. JOHNSON.

IMPROVEMENT IN CARDING-MACHINE TEETH.

Specification forming part of Letters Patent No. 107,842, dated September 27, 1870.

I, WILLIAM H. WHITING, of Willington, in the county of Tolland and the State of Connecticut, have invented an Improved Card-Tooth, of which the following is a specification:

Nature and Object of the Invention.

My card-tooth is for use in machines for carding cotton, wool, and flax; and the object of the improvement is to so harden and shape that part of the tooth which is near the point that this part shall be more durable than the rest of the tooth, leaving the body or crown of the tooth unaltered, and of its original toughness and tenacity.

Description of the Accompanying Drawing.

Figure 1 is a side view of a piece of cardclothing with my improved teeth inserted, of about the actual size used. Fig. 2 is a side view of a single tooth, greatly enlarged, so as to plainly show my improvement. Fig. 3 is a front view of the same.

General Description.

Card-teeth are commonly of about the size shown in Fig. 1, and consist, generally, of a piece of wire bent into the general shape indicated in Figs. 1 and 3. They are made in a machine specially constructed for that purpose. A simple way of making my improved tooth would be to cut the wire into proper lengths, flatten the ends of these cut pieces sidewise, under a sudden blow or under rolls, till the ends are shaped as shown in Figs. 2 and 3, and then bend the piece into the required general shape. As a matter of fact, however, I make my card-teeth in the ordinary machine, after making some change in the machine, which it is foreign to the purpose of this instrument to describe here.

I am well aware that John L. Tuttle, in his patent dated October 14, 1856, describes steel card-teeth flattened throughout their whole length in a peculiar manner, and I am also aware that R. Kitson, in his patent of November 11, 1851, shows substantially the same thing in iron; but to neither of these inventions do I make any claim.

I only flatten my tooth from the point b to about the elbow a, and the advantages I gain are, first, I make the point of the tooth hard, and thus more durable; second, I make the point of the tooth long in the direction of its motion for labor, and thus increase its durability; third, I leave the body or crown of the tooth, from the elbow a to elbow a, unhardened and unflattened, so that it can be freely bent into the general shape required without any danger of breaking from brittleness. Nor will my tooth break from this cause while at work, for the body of the tooth is left unaltered, which is a great advantage over the teeth described in both the aforesaid patents.

Claim.

A carding-machine tooth having its points flattened and hardened back to or about to the bend a, and its body or crown cylindrical, substantially as and for the purpose set forth.

WILLIAM H. WHITING.

Witnesses:

GEORGE E. ROBBINS, S. C. EATON.