

# UNITED STATES PATENT OFFICE.

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ONE-THIRD TO FRANK TAYLOR, OF WILMINGTON, DELAWARE.

## CELLULOSE.

No. 822,430.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed September 24, 1904. Serial No. 225,776.

*To all whom it may concern:*

Be it known that I, JAMES S. COCHRAN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Cellulose, of which the following is a specification.

My invention consists of the utilization of the fuzz of cotton-seed hulls to produce a cellulose useful for the manufacture of guncotton or other explosives, artificial silk, &c.

I find that after cotton-seed is divested of all staple fiber, such as cotton and lint, there remains on the hull a non-staple nature of the order of fuzz which of itself possesses valuable qualities.

I subject the hull so divested to attrition or other mechanical means, whereby said fuzz is disconnected from the hull in pure and unchanged condition, and then by an air-blast or other means separate the fuzz from the hull and collect the former by itself without admixture.

I am aware that it has been proposed to subject cotton-seed to solvents or other chemical action to remove the fuzz from the hull, which practically destroys the same as fuzz; but in my case I reclaim said substance from the hull in natural condition, producing a commercial commodity for various purposes.

In some cases I bleach the fuzz, and thus

form a cellulose of low grade which is admirably adapted for the manufacture of guncotton or other explosive.

The process or method involved in the production of cellulose, as above, forms the subject-matter of a separate application for Letters Patent, the same being filed by me on the 13th day of March, 1906, Serial No. 305,781.

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

1. As a new product of cotton-seed, fuzz of the hull of said seed mechanically reclaimed in pure and unchanged condition after all staple fiber and lint have been removed from the seed.

2. Cellulose produced from the fuzz of cotton-seed, mechanically reclaimed in pure and unchanged condition after all staple fiber and lint have been removed from the hull.

3. Cellulose produced from the fuzz of cotton-seed, mechanically reclaimed in pure and unchanged condition after all staple fiber and lint have been removed from the hull and bleached.

JAMES S. COCHRAN.

Witnesses:

JOHN A. WIEDERSHEIM,  
WM. CANER WIEDERSEIM