

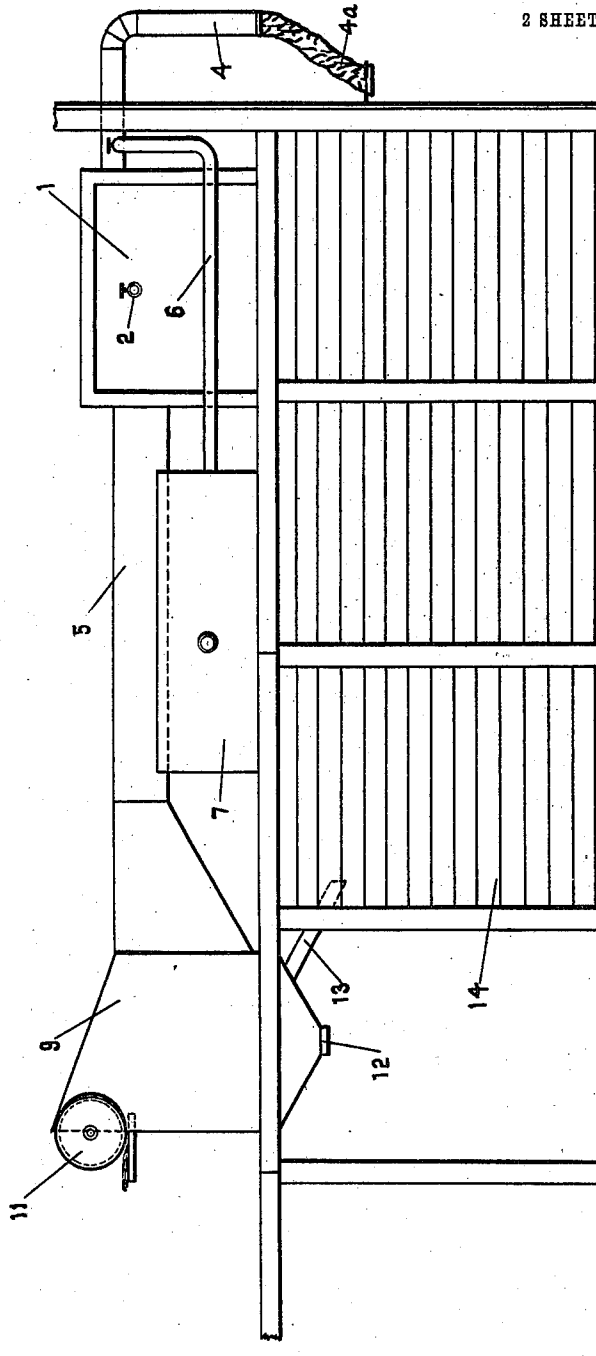
A. G. MYERS.
 APPARATUS FOR SEPARATING COTTON FROM ITS SEED.
 APPLICATION FILED MAR. 7, 1910.

984,589.

Patented Feb. 21, 1911.

2 SHEETS-SHEET 1.

Fig-1



WITNESSES:

Albert E. Knight

J. S. Murray

INVENTOR

Absalom G. Myers

BY

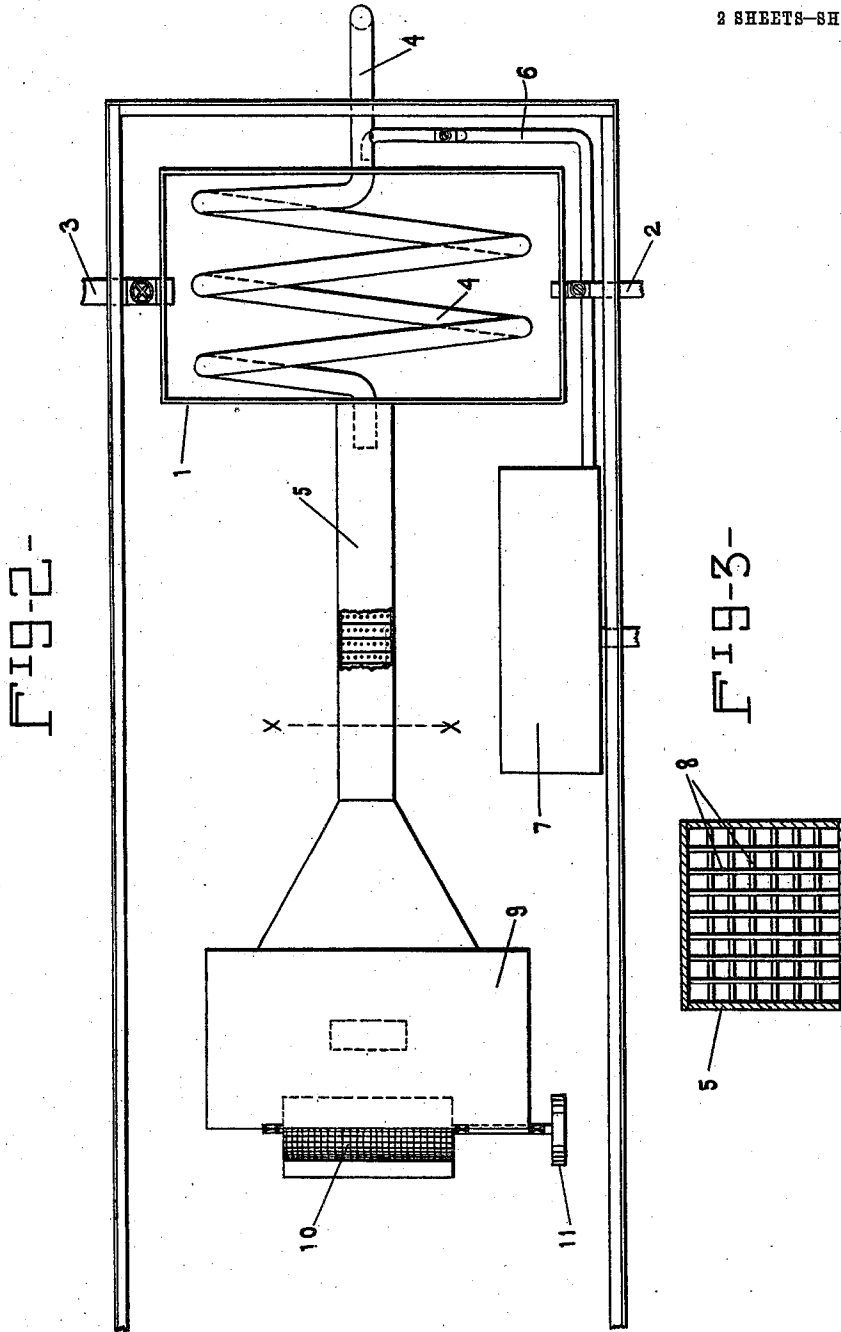
John M. Sellman
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UNITED STATES PATENT OFFICE.

ABSALOM G. MYERS, OF DALLAS, TEXAS, ASSIGNOR OF ONE-HALF TO ALVIN C. THOMPSON, OF DALLAS, TEXAS.

APPARATUS FOR SEPARATING COTTON FROM ITS SEED.

984,589.

Specification of Letters Patent. Patented Feb. 21, 1911.

Application filed March 7, 1910. Serial No. 547,857.

To all whom it may concern:

Be it known that I, ABSALOM G. MYERS, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Apparatus for Separating Cotton from its Seed, of which the following is a specification.

My invention relates to a new and improved apparatus for separating cotton from its seed. Its object is to provide means whereby a certain amount of heat will be applied to the cotton, causing the lint to be loosened from the seed, and to provide further means by which the seed and the detached lint may be passed into separate receptacles.

A further object is to apply heat to the cotton by passing it through spiral coils within a steam chest, and to provide a passage way through which the cotton will pass after leaving said coils containing obstructions adapted to further separate the lint from the seed.

A still further object is to provide an air-blast to propel the cotton through said coils of pipe and through said obstructed passage way, the lint being finally carried by said air-blast across a receptacle, into which the weight of the seeds causes them to fall.

Finally, the object of the invention is to provide a device of the character described which will be strong, durable, simple and efficient, and comparatively easy to construct, and also one in which the various parts will not be likely to get out of working order.

With these and various other objects in view my invention has relation to certain novel features of the construction and operation, an example of which is described in the following specification and illustrated in the accompanying drawing, wherein:

Figure 1 is a side elevation of the herein described apparatus, the same being shown mounted upon a platform beneath which is placed a receptacle for seed. Fig. 2 is a top view of the same, the cover of the steam chest being removed to show the coils there-within and a portion of the obstructed passage way being broken away to show the obstructions therewithin. Fig. 3 is cross section through the obstructed passage way, taken on the line $x-x$ of Fig. 2.

Referring now more particularly to the drawing wherein like numerals of reference designate similar parts in all the figures, the numeral 1 denotes the aforesaid steam chest in which is provided a supply-pipe 2, and an exhaust pipe 3. The pipe 4 terminating at its lower extremity in the flexible sleeve 4^a is adapted to convey cotton from a wagon to a number of coils formed in said pipe positioned within the steam chest 1. In order to elevate the cotton from the wagon and to force it through the coils 4 and the passage-way 5 a strong blast of air is introduced into the pipe 4 and directed toward said coils, the air being conveyed through a pipe 6 connected with a compression tank 7. After passing through the coils 4 the cotton is ejected therefrom into the passage way 5 wherein its progress is obstructed by a number of bars 8, some of which are arranged vertically and others horizontally. Impinging upon these bars the cotton lint which has already been separated from the seed in passing through the steam chamber will be still further loosened therefrom. On escaping from the passage-way 7, the lint and seed will pass into an expansion chamber 9. The air-blast will sustain the lint passing through this chamber and will convey it to the usual cylindrical screen condenser, which forms a revolving outlet for said lint and forms it into the usual bat. The cotton seed, owing to their weight will not be sustained by the air blast but will fall into the bottom of the expansion chamber 9. From this chamber they may be removed either by the door 12 beneath which a wagon may be positioned or they may be allowed to pass through a suitable spout 13 into the large seed receptacle 14.

The temperature of the steam in the chamber 1 will be high enough merely to loosen the lint from the seeds and will not be sufficiently high to injure the oil producing qualities of the seeds.

Various changes may be made in the above described invention, without departing from the spirit or sacrificing the advantages thereof, as for example, other obstructions than the bars 8 may be placed in the passage way 5 and accomplish its same results, and another condenser from that shown may be used equally well, as no novelty is claimed for the condenser. Therefore, I reserve the

right to make such changes and alterations in this invention as are fairly covered by the following claims.

What I claim is:—

5 1. In a device of the character described, the combination with a pipe for conducting cotton, of means by which a portion of said pipe is heated, an obstructed passage-way into which said pipe discharges, vertical and
10 horizontal bars forming an obstruction to the motion of the cotton through said passage-way, and means for forcing the cotton through the pipe and passage-way, substantially as described.

15 2. In a device of the character described, the combination with a pipe for conducting cotton, of means by which a portion of said pipe may be heated, an obstructed passage-way into which said pipe discharges a receptacle into the upper portion of which
20 said passage-way discharges, a lint condenser mounted in the wall of said receptacle opposite to the inlet thereto of said passage-way, and means for forcing the cotton through said pipe and passage-way,
25 substantially as described.

3. In a device of the character described, the combination with a pipe for conducting cotton, of a steam chamber inclosing a portion of said pipe, and means for conducting
30 steam to and from said steam chamber, an obstructed passage-way, into which said pipe discharges, and means for forcing the cotton through the pipe and passage-way,
35 substantially as described.

4. In a device of the character described, the combination with a pipe for conducting cotton, of a steam chamber inclosing a por-

tion of said pipe, means for conducting steam to and from said steam-chamber, a
40 passage into which said pipe discharges, vertical and horizontal bars obstructing the passage-way, and means for forcing the cotton through the passage-way, substantially as described.

45 5. In a device of the character described, the combination with a pipe for conducting cotton, of a steam chamber, inclosing a portion of said pipe, means for conducting steam to and from the steam-chamber, an
50 obstructed passage-way into which said pipe discharges, a receptacle into the upper portion of which the passage-way discharges, a condenser mounted in the wall of said receptacle opposite to the inlet thereto of said
55 passage-way, and means by which the motion of the cotton through the passage-way is obstructed, substantially as described.

6. In a device of the character described, the combination with a pipe for conducting
60 cotton, of means by which a portion of said pipe is heated, an obstructed passage-way into which said pipe discharges, vertical and horizontal bars forming an obstruction to the motion of the cotton through said pas-
65 sage-way, and means by which a blast of air is discharged into said pipe to force the cotton through the same and through the passage-way.

In testimony whereof I have signed my
70 name to this specification in the presence of two subscribing witnesses.

ABSALOM G. MYERS.

Witnesses:

J. S. MURRAY,
EUGENIA HENSLEY.