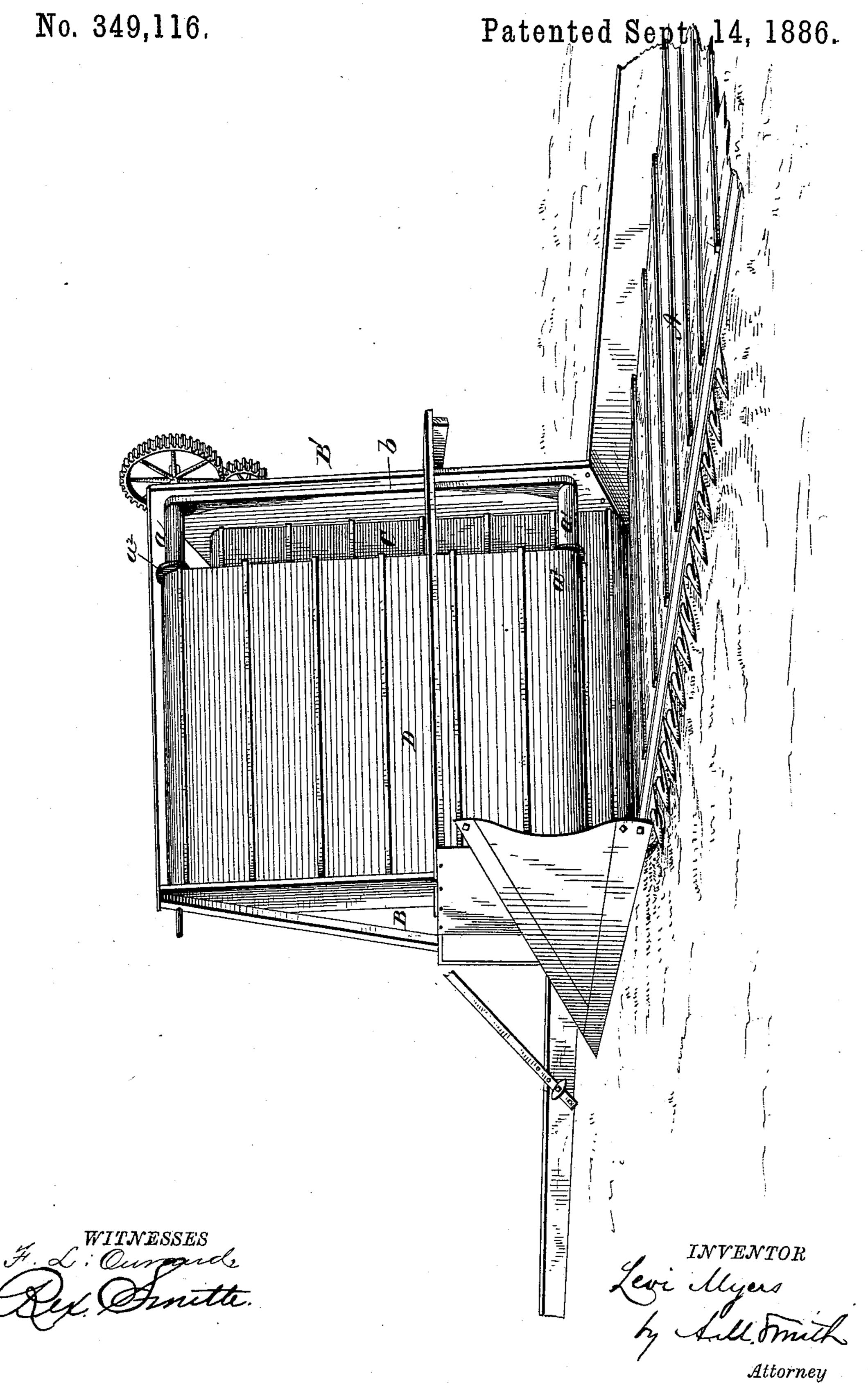
L. MYERS.

## ELEVATOR FOR GRAIN HARVESTERS.



## United States Patent Office.

LEVI MYERS, OF AKRON, OHIO, ASSIGNOR TO LEWIS MILLER, OF SAME PLACE.

## ELEVATOR FOR GRAIN-HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 349,116, dated September 14, 1886.

Application filed November 16, 1885. Serial No. 182,977. (No model.)

To all whom it may concern:

Be it known that I, LEVI MYERS, of Akron, county of Summit, and State of Ohio, have invented a new and useful Improvement in 5 Elevators for Grain-Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification.

My invention relates to a novel construction of the elevator, with a view to avoiding pressure upon the heads and the consequent thrashing out of the grain in the process of elevating the grain; and it consists in making the upper elevator canvas or apron of less 15 width than the lower, and in so mounting and arranging it relatively to said lower apron and to the straw moving upward thereon that while the straw is supported and properly upheld-throughout its entire length by the lower 20 apron the upper apron will act only on the stalks of the grain, being shortened at the rear, so as not to overhang the heads, thereby leaving the latter free from pressure during the process of elevating the grain, and will 25 be fully understood from the following description with reference to the drawing, which represents in perspective as much of a harvesting-machine as is necessary to show my improvement.

30 A indicates a portion of the grain platform or carrier behind the cutting apparatus; B B', the front and rear uprights of an elevatorframe at the inner end of the platform-carrier, made in the usual triangular or other suitable 35 form; and C, the lower elevator slatted apron or canvas, upon which the grain rests in being carried from the inner end of the platformcarrier up to the binder table or receptacle, said parts being constructed and arranged in

40 any usual or preferred manner.

The frame B B' is provided with suitable roller-bearers, b, the rear one only being seen on the drawing, in which the upper and lower rollers, a and a', of the upper elevator canvas |45 or apron, D, are journaled, and to which motion is imparted for actuating said apron in any usual or suitable manner. The lower apron or canvas, C, is of sufficient width from front to rear to fill in snugly the space between

the uprights B and B' of the elevator frame 50 and to accommodate the straw, while the upper canvas or apron, D, is made of less width than the lower, so as not to extend over the heads of the grain which rest upon and are moved upward by the rear portion of the lower 55 apron. The rollers a and a' of the upper canvas or endless apron, D, are of the same length as the lower rollers, extending entirely across the frame, but are provided at a suitable distance from their rear ends with collars 60  $a^2$ , which serve to guide the endless apron and prevent it from slipping back on the rollers, the forward edge of the apron moving in close proximity to the rear face of the forward upright, B. By this construction the upper can- 65 vas or apron is held in proper position to act upon the stalks of the grain, and is prevented from overhanging and pressing upon the heads thereof, thereby avoiding the thrashing out of the grain due to the pressure of the upper 70 canvas upon it in these machines as ordinarily constructed. The heads of the grain are left free and unconfined by the apron D, and the grain escapes more readily from the elevator than where the heads are held clamped 75 or compressed between the aprons thereof, especially when, as frequently happens, the head ends of the straw get bent into line with the path of the movement of the elevatorapron, and so get caught and held by follow- 80 ing heads or straw.

The endless aprons or carriers C and D may of course be composed each of a series of narrow endless belts instead of in a single piece, so long as the relative width of the two 85 carriers is preserved, leaving the upper of less width than the lower, and the portion of the latter on which the heads of the grain rest and are carried uncovered by the upper apron, as shown; but the construction shown 90

and described is preferred.

Parts of the machine not specifically described may be constructed in any usual or preferred manner.

I am aware that it is not new to employ 95 elevator-aprons of different widths, the upper one of less width than the lower; also, that the upper roller of the apron has been extended

2 349,116

entirely across the elevator-frame in the form of a tumbling extension for driving the same; but,

Having now described my invention, I claim 5 as new—

1. In a grain-harvester, the combination, with the wide lower elevator canvas or endless apron, of the upper elevator canvas apron, made of less width than the lower apron, and no mounted on rollers extending the entire width of the elevator-frame and arranged over the forward part of the latter, whereby it is adapted to assist in elevating the grain without pressing upon or confining the heads therest, substantially as described.

2. The combination of the lower elevator carrier or apron, the upper canvas or apron, made of less width than the lower apron, and the rollers extending entirely across the elevator-frame and provided with collars for actuating and guiding said upper apron, arranged and operating substantially as described.

In testimony whereof I have hereunto set my hand this 7th day of November, A.D. 1885.

LEVI MYERS.

Witnesses:

O. L. SADLER, T. C. MARSHALL.