

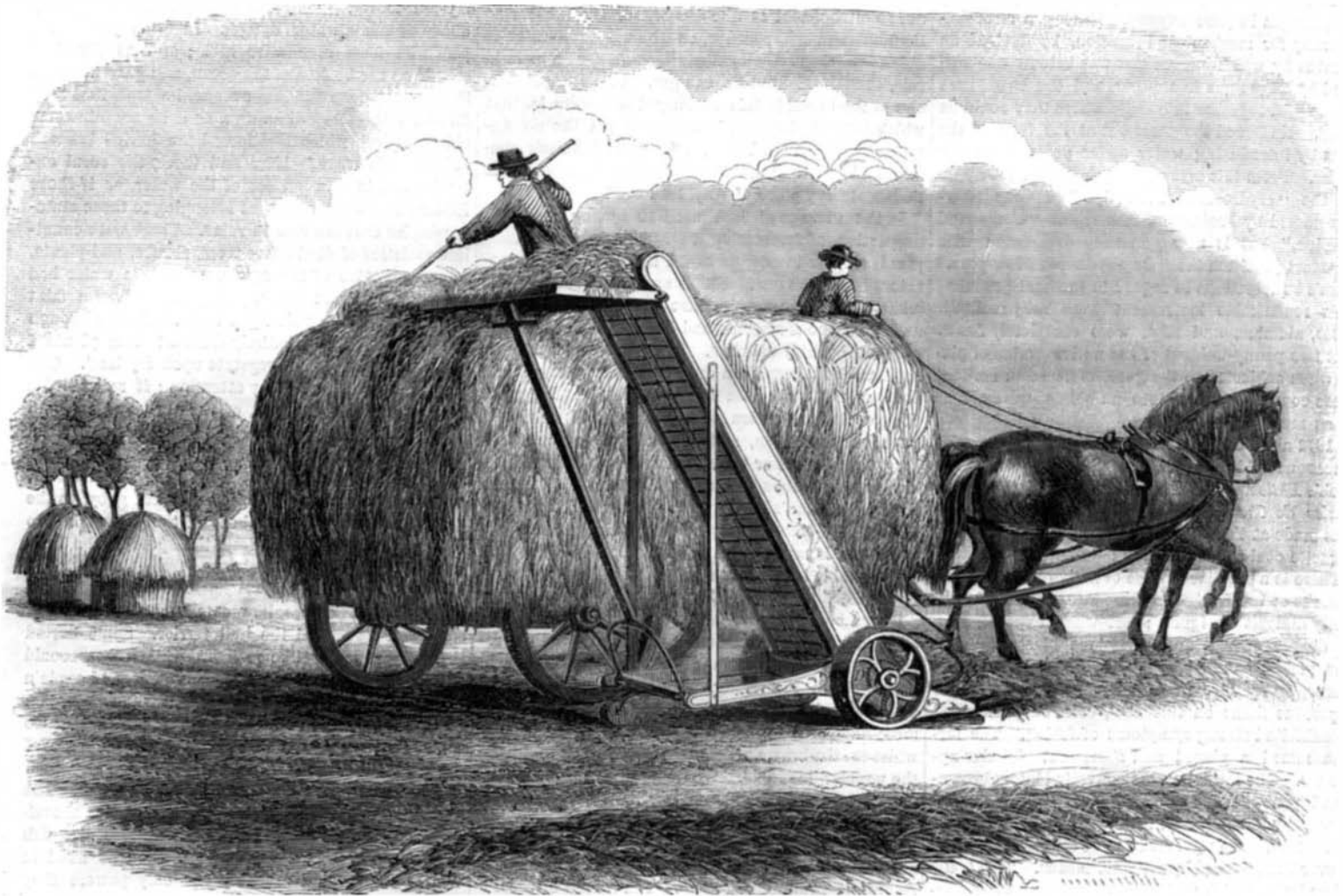
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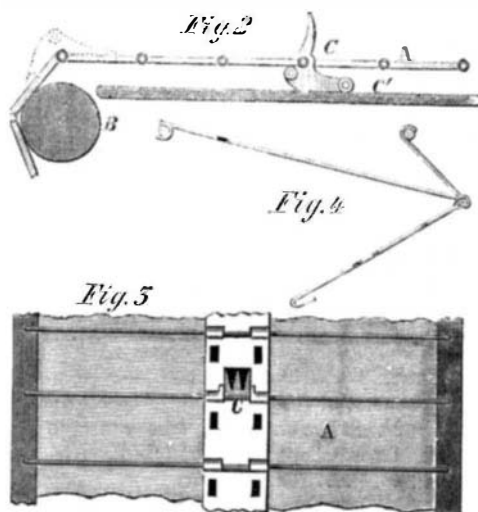


## BENTLEY'S HAY-LOADING MACHINE.

The labor of loading hay in the field is very fatiguing on a hot summer's day, and on large farms, where heavy crops are grown, the labor is very severe. It is desirable that this work should be done by machinery, not only to exempt the farmer from hard work, but to facilitate the operation, and thus greatly lessen the cost of production. By the use of the self-loading arrangement herewith illustrated the farmer or his assistants can ride from one end of the field to the other, as the machine is operated by the progress of the team. One man trims the load on top as it is delivered so as to preserve the balance, and the only other assistance required is that of the driver to control the horses.

This machine will be easily understood by referring to the engraving. The elevating apparatus consists of an endless apron, A, running over two rollers at the top and bottom of the machine; one of these rollers can be seen at B', in Fig. 2. At regular intervals there are self-adjusting forks, C, fastened to the endless apron as shown in Figs. 2 and 3; these run on ways, C', beneath. The apron receives motion from the rollers, and the rollers themselves are driven by the gears, D, one of which is on the axle of the pair of wheels the machine runs on, and the other upon the roller axle; thus as the team or wagon advances, the loading apparatus being connected with

it by the arrangement shown in Fig. 4, the apron revolves, and the forks, coming in contact with the hay, carry it up to the top where it is discharged into the



wagon beneath. There is a platform above, on which the workman stands, this can be folded up out of the way when the machine is not in use. The forks be-

fore-mentioned fold down, as shown in Fig. 2, in passing over the top roller, so that they do not catch in the hay at all; were it not for this the hay would be drawn over and scattered on the ground, thus defeating the object. As the machine advances the hay is lifted first by the chute end of the elevator and carried to the forks on the apron, and by these latter the hay is elevated to the top of the machine in the manner alluded to. By the arrangement in Fig. 4, the machine is drawn along with the wagon at a regular speed, and the other parts enabled to perform their functions in the proper manner; it can be detached in a moment if required. In addition to the self-loading arrangement the machine also rakes after the wagon, the rake being so adjusted that the teeth do not catch in the ground. This is accomplished by having a spring in connection with the castor wheel behind. This machine is very highly spoken of, and is claimed to be a great improvement on the slow and laborious plan of loading hay by hand. It can also be used to unload the wagon in the barn, and for elevating straw or fodder to the scaffolds or mow above.

This machine was patented by Wm. H. Bentley, of Westford, N. Y., through the Scientific American Patent Agency, on the 17th of November, 1863. State rights to manufacture are for sale; for further information address the inventor as above.