

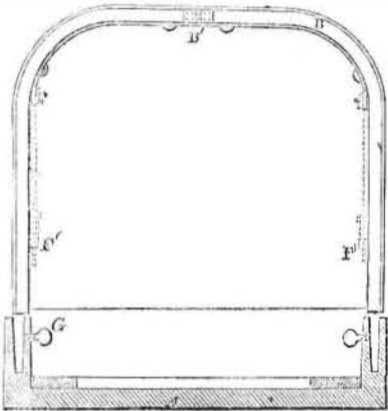
New Inventions.

Jennings' Improved Carriage Tops.

The inconvenience of having a top or cover rigidly fixed to a vehicle is often felt, and a top which will take off and put on is so cumbersome and unseemly that they are seldom adopted. Mr. Jennings has endeavored, in the invention here illustrated, to render a top light, portable, and easily adjustable, and its construction will be seen by reference to the following engravings.

Fig. 1 is a front view of the whole, Fig. 2 a transverse section, and Fig. 3 a plan of the

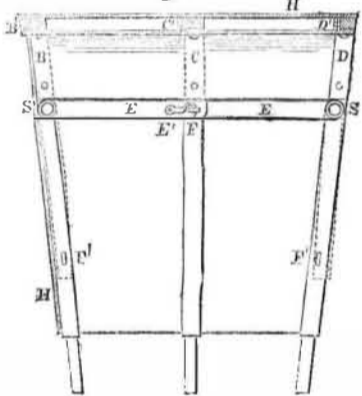
Fig. 1



arrangement. The same letters refer to similar parts in each.

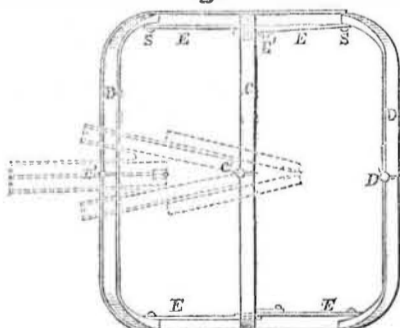
A is the seat or body of the vehicle, having a slot at each side, in which the bows of the cover fit, and G are screws, which hold them

Fig. 2



just when fixed. B C D are the frames or bows, which are made of the usual material and shape; they are, however, divided in the center, and are capable of being folded by means of the hinges, B' C' D'. The bows are connected together and held apart by the

Fig. 3



pieces, E E, which are fastened by the hook, E', passed through the staple, F. F' F' are other staples, to which E E are fastened when the whole is folded. S S are the hinges for E E, and H is the cover cloth.

The folding operation is very simple. The cover cloth is loosened, and the catch or hook taken out of the staple, and the whole then doubled up by means of the hinges in the bows. It is an inexpensive and useful invention, and was patented March 31, 1857.

For further particulars and information apply to R. S. Jennings, Waterbury, Conn.

Improved Grain Cleaner.

J. R. Gates, of Eckmansville, Ohio, is the inventor and patentee of the machine here represented for cleaning grain. It was patented on the 19th of May last, and is already,

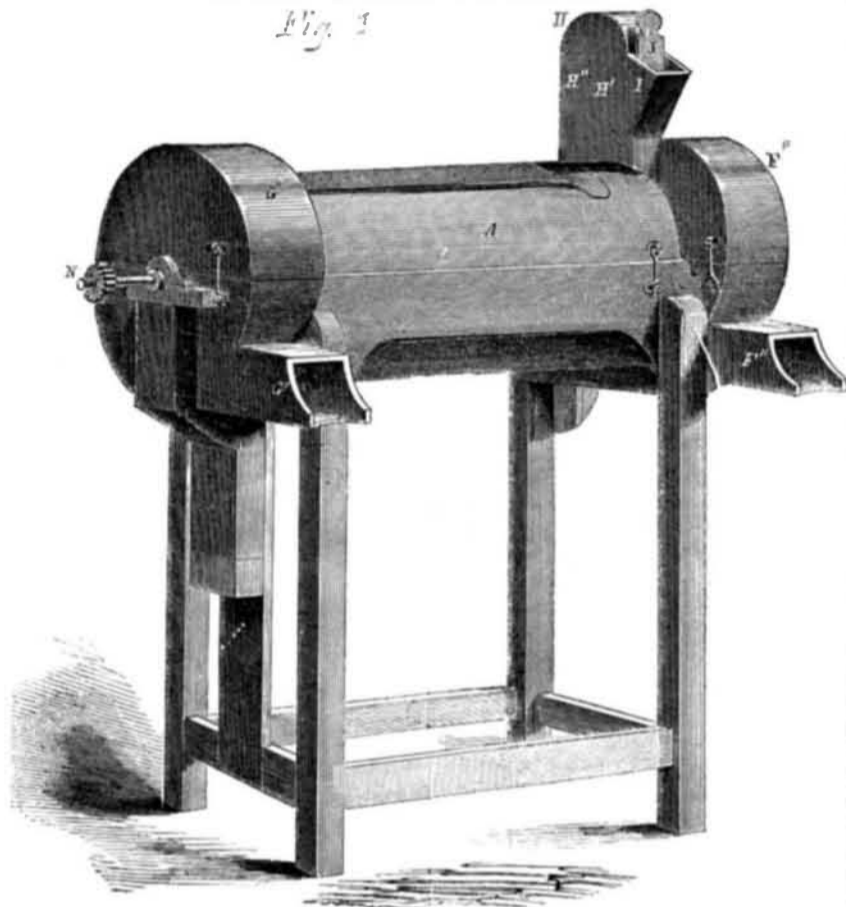
to some extent, in use. The grain is beaten by alternate contact with beaters, on a rapidly revolving horizontal shaft, and a lining of burr stone within the lower half of the inclosing case. A powerful blast of air is drawn through, to remove the dust and smut, by the aid of a fan at one extremity of the case, and a circulation of air passing through the feed box is introduced by an additional fan at the

other extremity; and by the aid of the latter the coarse dirt, and all the false grains, cheat, etc., are moved.

Fig. 1 is a perspective view, Fig. 2 a longitudinal section, and Fig. 3 a transverse section.

A represents the exterior of the cylindrical case which forms the cleaning device, B is a horizontal shaft, and C represent beaters dis-

GATES' GRAIN CLEANER.



posed thereon, and extending radially to the surfaces of the burr-stones, D, which line the lower portion. E represents an inside case, only employed on the upper half, and which is perforated, to allow a draft of air to rise upwards among the agitated grain. F represents a fan fixed in a suitable box, F', at one extremity of the cleaner, and G a similar fan in a similar case, G', at the other extremity. Both fans are fixed on the shaft, B, of the

mill, and both discharge a powerful blast of air through their respective apertures, F'' and G''. H is a box intervening between the fan, F, and the body of the mill, and which is, by a suitable partition, divided vertically nearly to the top, thus connecting two vertical passages, H' and H'', connected at the top. I is a hopper, into which the grain is fed, and J a slide, by which the rate of feed may be controlled.

Fig. 2

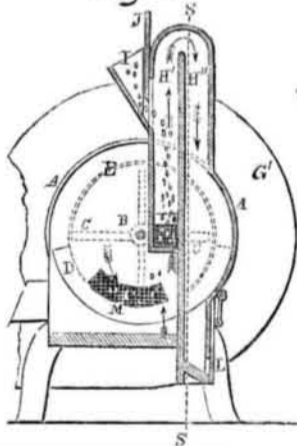
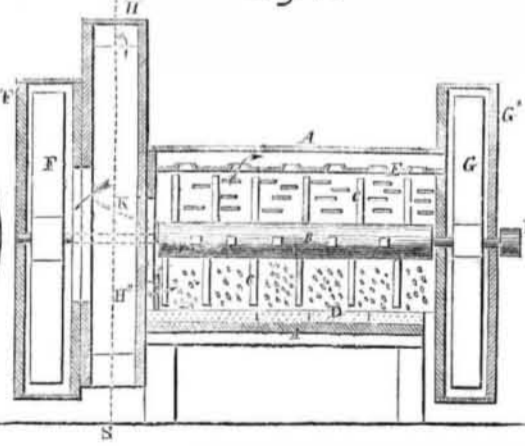


Fig. 3



K is an inclined screen of wire, which extends across the passage, H'. This is the passage into which the grain is fed from the hopper, and the screen, K, receives the falling grain, inclines them inward, and throws them through a suitable aperture into the cleaning device, A B C. The fan, F, draws a strong current of air upwards through the screen, K, which carries all the loose dirt and light grains up the portion H', over the upper edge of the separating partition, and down the portion H''. About the middle of H'', the air turns sidewise, and enters the fan box, F', while the heavier cheat descends by its momentum, and lodges in the lower portion of H'', from whence it may be removed at intervals by opening the door, L, which is held by a spring. M represents a netted opening in the lower portion of the case, A, at one end,

through which a liberal supply of air rushes, to cleanse the grains, and which finally rises, as indicated by the arrows, carrying the dust removed by the agitation through the openings in E, into the fan, G, and is discharged through G''. S S (Figs. 2 and 3,) represents the lines of section on which Fig. 2 is taken.

For further information Mr. Gates may be addressed as above. See advertisement on another page.

Good News for Inventors.

The various employes of the Patent Office are now at their posts, after their summer vacation, and the Department hums with industry. We are assured that all patent cases will now receive prompt attention. This is good news for inventors. Send on your models, all ye who want patents!

Inventors, to the Rescue!

The late terrible disaster to the steamer *Central America* should be regarded by inventors as a special call upon them by suffering humanity. Five hundred strong men, with death staring in the face, were unable to construct anything that was capable of properly floating them; and at the end of two days they were miserably launched into eternity.

The steamer had five life boats of the best known construction—four were of wood, and one of metal. The latter, in the effort at lowering, was thrown by a sea against the vessel's side, and stove. It sank, a useless shell. One of the wooden boats was also stove and sunk.

It would seem that the *Central America* had plenty of pumps, but they became choked up, or, in some unaccountable manner, were broken. The cylinder or barrel of one of them is reported to have burst.

The life-preservers were of tin, and it is said that the least dent rendered them entirely useless.

We appeal to American inventors, and ask them forthwith to apply their minds to the invention of new devices for the saving of life when endangered by such catastrophes as that which had just engulfed the *Central America*. Cannot pumps be invented that will never choke? Cannot life-boats be made that will not sink? Cannot life-preservers be produced that will be available in case of necessity? Can no new article be invented, compact when not in use, but strong, efficient, and ready when disaster comes? Can every other conceivable thing be done by inventors except flotation upon the water's surface?

Contemplated Introduction of Seed from Northern China.

Mr. Robert Fortune, who has been employed for several years by the East India Company and the London Horticultural Society, to collect seeds and plants in various parts of China, has offered his services to the Patent Office, to visit the northern provinces of that country, to procure the seeds of the best varieties of the tea-plant, as well as others, with a view of cultivating them in the United States. The Commissioner of Patents has responded, inquiring the amount of compensation he may ask, and solicits a paper on the subject from him for the next Agricultural Report.—*Exchange*,

[We hope that this is true, and that Mr. Fortune's services will be accepted, as he is a gentleman of high botanical acquirements, and will do honor to any nation who employs him. He is well acquainted with China, and has written several descriptions of his adventures and travels in that country.]

Fifteen Hundred Dollars in Cash Prizes.

The proprietors of the *SCIENTIFIC AMERICAN*, desirous of increasing their circulation, and doing away with the system of employing traveling agents to solicit subscriptions, offer the following splendid prizes for FIFTEEN of the largest lists of mail subscribers received at this office before the 1st of January, 1858:—

For the largest List	\$300
For the 2d largest List	250
For the 3d largest List	200
For the 4th largest List	150
For the 5th largest List	100
For the 6th largest List	90
For the 7th largest List	80
For the 8th largest List	70
For the 9th largest List	60
For the 10th largest List	50
For the 11th largest List	40
For the 12th largest List	35
For the 13th largest List	30
For the 14th largest List	25
For the 15th largest List	20

Names of subscribers can be sent in at different times and from different Post Offices. The cash will be paid to the orders of the successful competitors immediately after the 1st of January, 1858. Circulars giving further particulars may be had gratis by sending to the publication office, 128 Fulton street.

We hope our friends throughout the country will avail themselves of the above liberal offer, and while they oblige us, they will be benefited to a far greater extent themselves.

See Prospectus on the last page.