

**Improved Self-adjusting Blind Fastener.**

Doubtless many persons have experienced annoyance from blinds slapping to and fro in windy weather, and wished for some means of fastening them securely. The ordinary devices for the purpose are not only ineffective but dangerous, for it is often necessary to reach out very far to fasten the shutters open or to detach them afterward, and accidents have occurred from persons losing their balance and falling out. Moreover, in rainy weather, if the sash has to be raised, curtains and carpets are injured. It is also agreeable, sometimes, to have the blind partly open in order to let light and air in which is impossible with the ordinary fastening.

The objects desired are obtained and the evils alluded to are all obviated by the excellent arrangement here illustrated. The details are so few and simple that they are well understood, without elaborate description.

They consist of a pair of brass rods, A, one to each blind, having a knob and pin, B, on the inner ends, the outer ends being fastened to the blind. These rods pass through holes in the sash, and are curved to the shape of the circle formed by the motion of the blind on its hinge. To the window sill is fastened a set of brass plates, C, with holes to receive the knobs. The plates may be of any desired number and are fixed at such points as parties desire. To operate the blind it is only necessary to take hold of the knob and transfer it from one hole to another without raising the sash; this swings the blind wide open or only partially so, and effectually controls its movements. This arrangement is also a lock to the blind which prevents it from being opened from the outside.

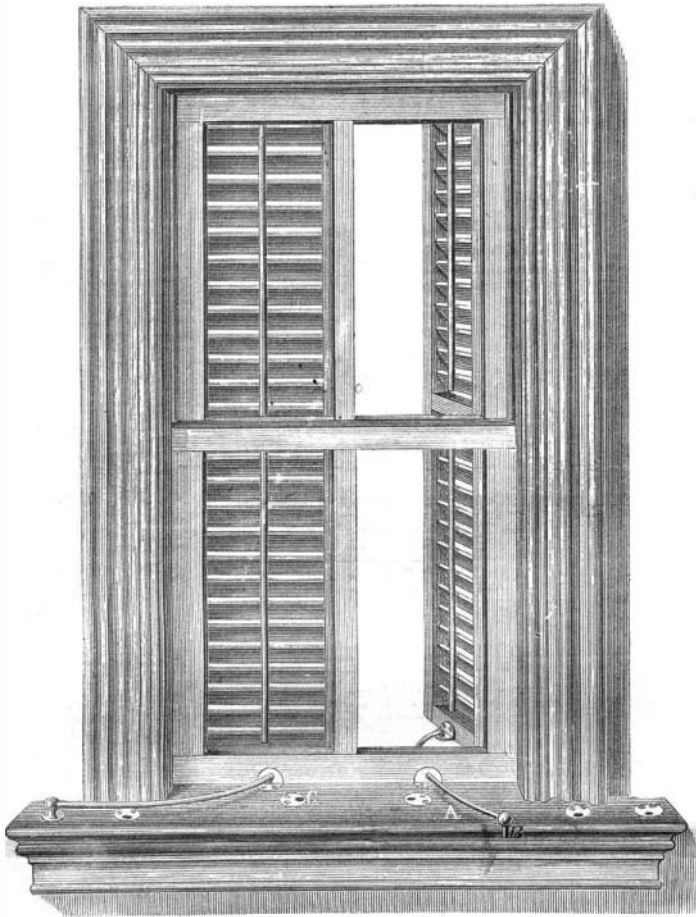
It was patented through the Scientific American Patent Agency on March 25, 1862, by Frank Chase, of South Sutton, N. H., for further information address him at that place.

**Improved Doubletree.**

When a team of horses is hitched to a heavy log or any other load that needs a strong and steady pull to start it, they draw willingly at first, but if it does not move they become restive and "pull altogether one after the other," as the saying is. This makes them fret so that a great deal of time is consumed in doing very little work. Moreover, it tends to make the horses balky.

In this engraving we have shown an invention which is claimed to be a remedy for these evils. The inventor provides the doubletree, A, with two cylinders, B, which have springs, either spiral or of rubber, within. The whiffletrees are attached to the eye bolts, C, as shown in the section of one of the cylinders. A cross rod, D, is also connected to

the cylinders so that they are always in line in the direction of the strain, as shown in the dotted lines. This renders both horses effective in pulling on the load, for if one gets a little the start of the other the spring is not cramped but acts the same as when both are in line. On rough roads this attachment is likely to prove effectual in saving horses and harness from shocks and sudden strains which are injurious to both. It may be used on plows or on vehicles of any class, and will encourage the horses to

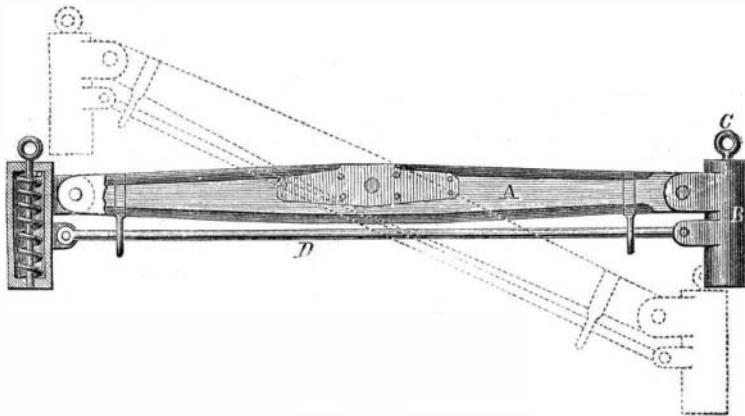
**SELF-ADJUSTING BLIND FASTENER.**

draw under disadvantageous circumstances. Rights for sale on reasonable terms.

For further information address W. Dowell, Hicksville, Ohio, by whom it was patented through the Scientific American Patent Agency on June 23, 1863.

**Southern Cultivator.**

We welcome among our many exchanges the return of this valuable monthly, which is devoted to the interests of Southern agriculture. It advocates recuperative prosperity for the South through industrial agencies—by which alone those States can hope to gain and far

**DOWELL'S DOUBLETREE.**

surpass their former renown. The *Cultivator* will prove a strong auxiliary to the promotion of these ends, and deserves a liberal patronage. W. N. White, Athens, Ga., publisher.

**Utilizing the Heat of Steam.**

Mr. D. E. Blacke, of Belfast, Ireland, has invented an apparatus which consists of a vessel in the form of a cylinder, or otherwise, to suit the form and position of the engine to which it is to be attached, into which he introduces tubes of any requisite size and number, making them fast in the ends of the vessel in such a way that the interior of the vessel will be steam-tight, the tubing being open at the ends for the purpose of allowing the steam and water that are blown into them to pass through. The said vessel is supplied with water from the boiler or boilers to which the engine is attached, and, if necessary, from the source whence the feed water is obtained, but either of these sources of supply may be used separately. To this tubular vessel he attaches a pipe leading to the boiler or to the engine, for the purpose of allowing steam free egress or ingress. He places the said tubular vessel in such a position with respect to the engine, that the steam after passing through the engine will, before it is allowed to entirely escape pass into the tubes, his object being to communicate to the contents of the tubular vessel the heat of the steam; the steam being used over and over again for the purpose of heating

This is a novelty.—Eds.

**A Natural Curiosity Made Useful.**

On the South Farralleone Islands, on the coast of California, is a remarkable subterranean passage, connected with a rocky gulch, open to the ocean. Through this passage the waves of the sea force the air with much violence, and an observation of the peculiar character of the wind current some years ago induced Colonel Bache, of the engineer corps, United States army, to undertake to arrange a fog whistle which would give an alarm to mariners approaching the place. This he succeeded in doing, and the wind instrument performed at nearly all times, but with different degrees of force—sometimes "piano passages," and at others fortissimo ones. About the time of low water, when the waves do not enter the gulch, it would cease for about two hours, when its shrill music would begin again. The force of the wind in stormy weather is so great that the first whistle erected by Colonel B. was carried away, and he subsequently constructed one of a disk of iron perforated with a hole six inches in diameter. This was securely fastened by heavy bolts to the solid rock, and it proved entirely successful.

**INVENTORS, MANUFACTURERS**

The SCIENTIFIC AMERICAN is the largest and most widely circulated journal of its class in this country. Each number contains sixteen pages, with numerous illustrations. The numbers for a year make two volumes of 416 pages each. It also contains a full account of all the principal inventions and discoveries of the day. Also, valuable illustrated articles upon Tools and machinery used in Workshops, Manufactories, Steam and Mechanical Engineering, Woolen, Cotton, Chemical, Petroleum, and all other manufacturing and producing interests. Also, Fire-arms, War Implements, Ordnance, War Vessels, Railway Machinery, Electric, Chemical, and Mathematical Apparatus, Wood and Lumber Machinery, Hydraulics, Oil and Water Pumps, Water Wheels, Etc.; Household, Horticultural, and Farm Implements—this latter department being very full and of great value to Farmers and Gardeners. Articles embracing every department of Popular Science, which every body can understand and which every body likes to read.

Also, Reports of Scientific Societies, at home and abroad, Patent-law Decisions and Discussions, Practical Recipes Etc. It also contains an Official List of all the Patent Claims, a special feature of great value to Inventors and owners of Patents.

Published Weekly, two volumes each year, commencing January and July

**TERMS.**

Per annum.....\$3 00  
Six months..... 1 50  
Ten Copies for One Year.....25 00  
Canada subscriptions, 25 cents extra. Specimen copies sent free  
Address

**MUNN & CO., Publishers.**

No. 37 Park Row, New York City.

Messrs. MUNN & CO. have had twenty years' experience in procuring Patents for New Inventions. Inventors who may have such business to transact can receive, free, all needful advice how to proceed.

FROM THE STEAM PRESS OF JOHN A. GRAY AND GREY