scientific American.

THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

VOLUME 5.]

NEW YORK MARCH 9, 1850.

[NUMBER 25.

Scientific American, CIRCULATION 14,000.

PUBLISHED WEERLY.

At 128 Fulton Street, New York, (Sun Building,) and
13 Court Street, Boston, Mass.

BY MUNN & COMPANY. The Principal Office being at New York.

Barlow & Payne, Agents, 89 Chancery Lane, London Geo. Dexter & Bro., New York City Stokes & Bro., Philadelphia. R. Morris & Co., Southern. Responsible Agents may also be found in all the principal cities and towns in the United States.

TERMS--\$2 a year--\$1 in advance, and the remainder in 6 months.

Roil Road News.

Indiana Railroads.

Some thirty-four miles of the Indianopolis and Bellfontaine Railroad, in Indianna, is nearly or quite ready for the iron. The Company have determined to lay the T rail, which they expect to provide early in the season. This portion of the track extends from Indianopolis to Andersontown, the County seat of Morrison County, and penetrates a fine agricultural re-

The Indianopolis and Peru Road has its superstructure completed from Indianopolis to Noblesville, a distance of twenty miles, and has recently made a contract at Pittsburg for iron to complete this portion of the road. The iron is deliverable in June, and the Company expect to be ready for the cars in October. The northern terminus of this road is Peru, on the Wabash and Erie Canal.

Both of these roads connect at Indianopolis, with the Madison and Indianoplis Road, and will contribute largely to the buisness of this

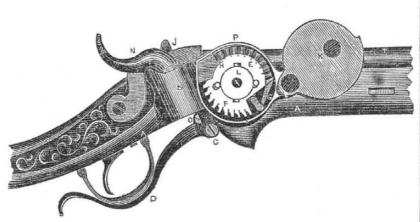
The Knightstown and the Rushville Roads, both of which connect with the Shelbyville Road, and by that with the Madison and Indianopolis Road at Edinburgh, are rapidly approaching completion. Both have full purchases of iron, and are rapidly laying it down. They will be ready for the cars early in the

Coal in Locomotive Engines.

We look, says the Mining Register, in sorrow at the terrible devastation made in our timber by the Reading Railway Engines. We are net about to complain that reasonable effort has not been made by that Company to discover some mode of burning coal so as to prevent the metalic destruction they attribute to its use. But inasmuch as the value of our coal is regulated in part by the convenience of timber for propping the mines; and as the Colliers of Schuylkill County already complain of the advantages which other coal fields possess, it is of the greatest importance that we be not placed in a still worse position, by cutting off our supplies of prop-timber. In the acknowledged saving which would be made by our Railway if coal could be substituted for wood fuel, we have assurance that every means will be taken to put a stop to the present fearful consumption of our timber. And in this hope, we sug gest the attempt to apply the hot-air principle as well under the grates, as in jets of air on the top of the fire. It would be easy to try it at small expense, and our experience in burning coal in ordinary stoves enables us to entertain great hopes that much fuel would thus be saved and the destruction complained of entirely obviated.

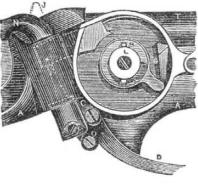
The New-Bedford Mercury states that Captain Timothy Colby in that city has a bed-cord made of whales' sinews, which has been in the Colby family since 1640-209 years and has been used by Timothy Colby 41 years, and it is now as good as a dozen new hemp bed-cords. It has never been broken.

SHARPS' BREECH-LOADING PATENT RIFLE.---Fig 1.



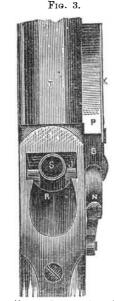
This Rifle is the invention of Mr. Christian to be attached to the box, L, inside, and to its Sharps, now of Mill Creek, Pa. It was pa- screw arbor. The object of this barrel spring ter is one ounce to the pound. After butter tented in 1848. The simplicity of its con- is to turn round the wheel, F, with the caps struction, will be apparent by the following description.

Fig. 1 is a side view showing the cap box open. Fig. 2, is a section showing the interior of the cap box. Fig. 3 is a top or plan view. The same letters refer to like parts. The engravings represent the barrel and the butt broken off, (as every body understands such parts) in order to present enlarged and clearer views. A represents the wooden stock. T is the barrel; B is the nipple or priming chamber communicating by a small orifice with the charge in the barrel, N, is the hammer. The charge is put in at the breech, and the breech itself is a moveable steel back, J, that is pushed up like a wedge to back the charge in the barrel, and then drawn down to purpose of holding the barrel box, under the allow another charge to be inserted. There is plate, H, after it is wound up, to take off the therefore a strong metal chamber behind the butt of the barrel, and a broad slot in it, in set free for the wheel to move gradually round.



up and down. This sliding breech is secured to a swivel pivot, O, which moves the breech up and down for the purpose stated, by being operated by the handle, D, which moves on a centre pin, C, thus allowing said handle to be drawn inwards to the butt (fig. 1) of the stock, when the breech is to be raised and pushed outwards (fig. 2) for the breech to be lowered for charging. To charge, the handle auxiliary action, and presents a breech-load-D is pushed forward, as represented in fig. 2, | ing rifle of singularly simple construction.when the ball, S, is thrust along the groove, R, into the chamber of the barrel, when the handle, D, is drawn back, as in fig. 1, the sliding steel breech, J, is pushed up, wedging behind the charge, and it is then loaded ready for firing. It is designed for caps, and is selfcapping. This is done by the caps, E, being the cap-box, P, as shown in fig. 1. This wheel spring is not shown, but it will be understood will meet with prompt attention.

a small iron plate, and behind it is a narrow wards, stripped off, one by one, as they pass small nipple opening, when the nipple, X, breech) catches the cap, and thus caps itself. The wheel moves round one cap every shot, by one being exploded to make way for another to pass into the said channel. The wheel may be capped for 50 rounds. In fig. 2, in the the barrel box, L, there is a catch, G, shaped like an angular lever. This catch is for the wheel, cap it, and put it on again. It is then which the moveable steel breech, T, is thrust | K is the lid of the cap box. This gun can be capped like another, without the self-capping F_{IG} . 3.



This rifle can be loaded and fired nine times in one minute. Its accuracy is equal to the common rifle. The picket, or patched ball can be used. It can carry half a mile with safety, and in one instance it was fired nine times in ome minute and all the balls were placed within a circle of six inches diameter, at forty set on spurs of a small meveable wheel, F, in | yards distance. Mr. Albert S. Nippes, is now making about 700 of them of the very best is taken out, armed around with caps, and set materials, and of superior workmanship. Oron to two small catches, M, which project out | ders addressed, (p.p.) to Mr. Nippes, Mill Creek, from each side of a barrel spring box, L. The | Manyunck Post Office, Philadelphia Co., Pa.,

Receipts.

This is an article of domestic food, more of which is consumed in the United States than in any other country on the face of the globe. Good sweet butter, oh how delicious. It very often happens among families in our cities, that they will purchase good sweet butter at the stores, and which in a day or two becomes vitiated in taste. This is owing either to the manner in which it is salted and packed, or the manner in which it is kept after it is purchased. Much butter is spoiled from using salt containing lime and other substances which hasten its decomposition. Salt can easily be purified by pouring upon it a little warm water and allowing it to drain; it dissolves and takes out the lime and other extraneous substances, and leaves the salt nearly pure. The quantity usually added to buthas become rancid, it can be restored and made on it, towards the priming box, B. At H is nearly sweet by a very simple process. This is, to wash it well in cold water, often changed, channel, into which the caps are carried in- and after pressing out the water, salt it anew and add a little sugar, say half an ounce to through the channel behind the plate, H, and the pound. This will be found to render it the one pushes the other forward above the much more palatable, although it may not entirely restore that delicate flavor peculiar to when rising, (as it forms part of the sliding new and sweet butter, which once lost can never be restored.

Butter should be kept in a cool, airy, dry place. The majority of city pantries and cupboards appear to be designed for the purpose of giving the butter kept in them, that peculiar odoinside of the spring barrel box, P, attached to rous flavor (so agreeable to a Hottentot) termed rancidity.

Simple Cure for Croup.

We find in the Journal of Health the following simple remedy for this dangerous disease. Those who have passed nights of great agony at the bedside of loved children, will treasure it up as an invaluable piece of information.— If a child is taken with croup, instantly apply cold water, ice water if possible, suddenly and freely to the neck and chest, with a sponge .-The breathing will almost instantly be relieved. So soon as possible, let the sufferer drink as much as it can; then wipe it dry, cover it up warm, and soon a quiet slumber will relieve the parent's anxiety, and lead the heart in thankfulness to the Power which has given to the pure gushing fountain such medical quali-

Extreme Cold.

The Vermont Chronicle, published at Windsor, Vt., says, that, on the morning of the 6th ultt., the thermometer fell in that village as low as thirty-five degrees below zero; in Woodstock, thirty-eight, and at Northfield, forty .--In New York City, at 7 A. M., it was 160 above

Colder Yet.

The Quebec Gazette says, that on the 5th ult., the mercury fell, at Porteneuf, on the St. Lawrence, 20 miles S. W. of Quebec, to fiftytwo degrees below zero, and continued below forty during the whole day. In this city, it did not fall lower than 12 degrees above zero.

Warning for Apothecarles.

A young lady in Trenton, N. J., a few evenings since, (says the State Gazette,) experienced a narrow escape from death, by having ad ministered to her a speonful of creosote, which was sent from an apothecary's shop in a vial very improperly labelled assafædita. The mistake was not discovered until the fatal poison was entirely swallowed, and the most agonizing pains ensued.

© 1850 SCIENTIFIC AMERICAN, INC