

Improved Spring Bed.

The above engraving represents an improved mode of constructing spring beds, for which Letters Patent were granted to Warren P. Miller, of Marysville, Cal., on June 9, 1863.

These beds are composed of conical spiral springs placed between longitudinal slats, and attached to vertical bars traversing through holes in the slats. On the top of each bar is a cap or button, upon which the mattress rests. The springs are but four inches apart from centers; there being about five times the number usually employed. They are comparatively light, interpose but slight resistance to pressure, and, as their action is independent one of the other, they readily adopt a position corresponding to the person. Two persons of unequal weight may occupy these beds without inconvenience to either, nor do they sink away in the center and form the sleeper into a segment of a circle.

In point of economy, ease, and durability these beds are unsurpassed. One ordinary mattress is sufficient to make a superior bed. They are so constructed as to preclude the possibility of getting out of order, and it is confidently asserted that they will last fifty years. All that is claimed for these beds will be readily conceded by an observer, and they need only to be used to be appreciated. Patented through the Scientific American Patent Agency. For further information address G. & E. H. Parish, Hinsdale, Mass.

NORTHERN COTTON CULTIVATION.

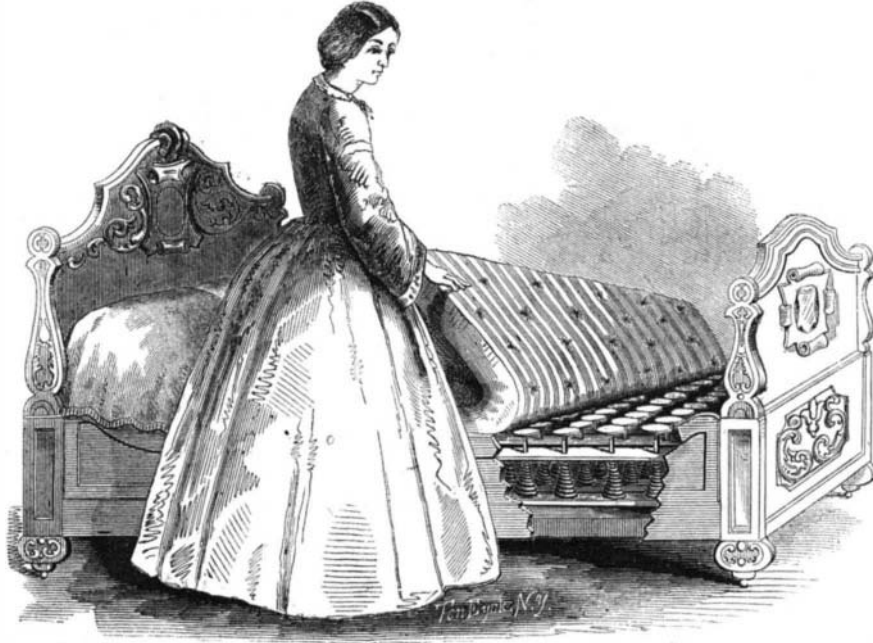
Although cotton has become scarce and high in price, from circumstances well known to all, and although flax and wool have taken its place, and perhaps will maintain their position in many classes of goods for which cotton was formerly used, still it is of such a peculiar character, that no other known fiber can supplant it for many purposes. The operations involved in its preparation for spinning are all of a mechanical nature and are executed with machinery. It has not to be retted and treated chemically like flax, and it does not require to be soaped and oiled like wool. Its preparation is therefore more simple and economical. Taken from the field, it but requires to be run through the gin and the picker, and is then fit for the carder. And it is so soft and pliable that it may be made into fabrics that have surfaces soft as the down of the swan, and also into lace thread, attenuated as the spider's web. Its cultivation, we understand, is becoming extended in localities where it was not formerly thought of, as a crop, and no doubt it may be cultivated in districts where it has been supposed it would never reach maturity. The very finest qualities of cotton are undoubtedly raised in warm latitudes near the tropics, but in China and Japan very good short staple is raised in latitudes as far north as Long Island, and these oriental varieties in all likelihood could be acclimated here. Our consuls in China and Japan should be instructed to forward seeds from their respective localities, with descriptions of the modes pursued in their cultivation. The greater number of fibrous materials which can be raised at home render us more independent of foreign supplies, and tend to increase our industrial resources.

LARGE POWDER MILLS.—The Union Powder Works in New Durham, N. H., turns out two tons of powder per day for the Government. These works, with three other larger establishments, furnish a large portion of the powder used in this war. The Dupont Works, Wilmington, Del.; Hazard, in Connecticut; Oriental, in Maine; and the Union, in New Hampshire, have turned out at the rate of 400 barrels per day.

"Highfalutin."

A writer in the "Atlantic," in the course of an interesting article on the photographic art, delivers himself of the following astounding paragraph:—

"Then we replace the slide in the shield, draw this out of the camera, and carry it back into the shadowy realm where Cocytus flows in black nitrate of silver and Acheron stagnates in the pool of hyposulphite,

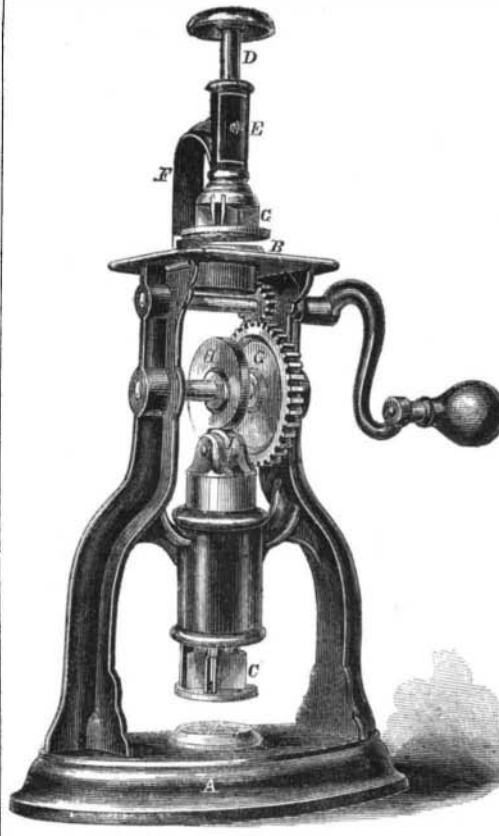
**MILLER'S PATENT SPRING BED.**

and invisible ghosts, trooping down from the world of day, cross a Styx of dissolved sulphate of iron, and appear before the Rhadamanthus of that lurid Hades."

The English of this is that the photographer brings out the features printed on the plate by washing it with sulphate of iron and hyposulphite of soda.

SCOTT'S PATENT STAMP-CANCELER.

The creation of an internal revenue tax, and the adoption of stamps by which to legalize the various



documents in use in business transactions, has demanded the introduction of machinery; in order to guard against fraud each stamp must be effectually canceled after it has been used, so that there can be no possibility of its being affixed a second

time to any other paper. The press herewith illustrated accomplishes this object by the following arrangement. The light cast-iron frame is supported by the bed-plate, A, and has on its upper end a polished table, B; this table has a raised boss under the knives, C, four in number, and is covered with leather to prevent them from being dulled. The knives are set in the shoulder of the rod, D, which works through the cylinder, E, of the arm, F. There is a spiral spring in this cylinder, so that by placing a document on the raised boss, and striking or pressing forcibly down on the button-head, the stamp is separated into four pieces and cannot be removed whole. This attachment of the press is intended for single stamps, but when necessary to cancel a large number at once, it can be done by turning the handle seen at one side; this is keyed on a shaft which carries a pinion working in the large spur wheel, G. The cam, H, runs on the friction roller, I, in the knife-head, and forces the latter down. When the cam has passed, the spindle carrying the knives flies up again and allows the papers to be withdrawn. This constitutes a power press, and is capable of exerting a great strain. The leather-covered portion may be seen very clearly on the lower part of the machine

under the knives. This machine is very strongly made, and will very fully accomplish the object for which it was designed. It was patented on April 1, 1862, by Edwin M. Scott, of Auburn, N. Y.; further particulars can be had by addressing Swasey, Fosgate & Co., at that place.

Fast Running.

The Hudson river steamer *Mary Powell*, Captain A. L. Anderson, made the run between this city and Poughkeepsie lately, in three hours and forty-two minutes. Leaving here at half-past three o'clock, P. M., she reached the latter city at twelve minutes past seven o'clock. Deducting thirty-five minutes consumed at landings and five minutes lost on getting into the stream on starting, and the actual running time for the seventy-five miles is three hours and two minutes—a feat unprecedented in the annals of Hudson-river steamboating.

[The steamer *City of Buffalo*, formerly running upon Lake Erie, has run 75 miles in three hours and six minutes frequently. The distance from Toledo to Buffalo is said to be 300 miles by the course run; the time between these two ports, of the boat above-mentioned, was equal to a speed of 22 miles an hour for fourteen consecutive hours. We think that is pretty fast steamboating.—Ems.

Lumber shipped from Philadelphia to Maine, &c.

The Philadelphia *Press* says that one firm in that city has furnished to various ports in the State of Maine the lumber necessary to complete, within the past two years, at least forty ships, of which four were United States gunboats. During the past year the following amounts of oak and pine timber were furnished by one house to the ports named:—To Bath, Maine, 523,640 feet; to Thomaston, Maine, 325,000 feet; to Searsport and Freeport, Maine, 327,099 feet; to Richmond, Maine, 278,138 feet; to Yarmouth, Maine, 241,899 feet; to other Maine ports, 500,774; to ports of Massachusetts, 67,200 feet. Total, 2,263,750 feet.

The prospects of the peach crop in New Jersey are said to be uncommonly promising. The backward spring delayed somewhat the budding of the trees and thus prevented the liability to blight.

An anvil block, weighing 100 tons, was cast at Sheffield recently. This is by far the largest casting ever made in England.