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# Scientific American.

NEW

Improvement in Horse Powers. Mr. A. D. Brown, of Clinton, Jones Co. Geo., has taken measures to secure a patent for an improvement in Horse Powers. It consists in an arrangement of the gearing by which the shaft to which the last or fastest motion is communicated, is made to pass through the centre of the master wheel, said wheel being cogged on the outer periphery. Motion is given to the shaft above mentioned by a pinion on cogs of which mesh into the cogs of the master wheel, the arbor of the pinion works into the outer ends of travelling wings, the opposite ends of the wings encompassing the shaft which passes through the centre of the master wheel. The arbour of the pinion has a pulley upon it, and there is also a pulley upon the shaft aforesaid; a band passes around these two pulleys. The shaft or pole to which the horse is attached, is connected to the lower travelling wing. Motion being given to the shaft or pole by the horse, the pinion is turned by passing around the master wheel, and motion is communicated to the working shaft by a pulley on the arbor of the pinion. The power may be taken off the shaft for driving other machinery above or below the master wheel.

## Improved Railroad Truck.

Mr. Abram Snyder, of Hawley, Wayne Co. Pa., has invented an improved truck for railroad cars, which consists in having three pairs of wheels to one truck, and each pair of wheels to be placed in a frame, the three frames being connected by a joint in such a way that each frame will conform to the curvatures or inequalities of the road without causing any strain upon the others. He employs cast-iron frames which cannot be employed in the ordinary trucks. On the upper surface of the truck, and over the joint is placed a circular rim, which serves as a guide to the pair of wheels in the centre of the frame. This guide prevents the centre wheels from getting off the rails, and it also is acted upon by the front frame, so that the centre wheels are assisted in turning or conforming to the curvatures of the road with as little friction as possible.

'Measures have been taken to secure a patent.

## Improvement in Burglars Alarm.

Messrs, L. J. Worden and E. H. Space, of Clinton, Oneida Co., N. Y., have taken measures to secure a patent for an improvement in Burglars Alarms which consists in securing the lever that acts upon the pallet in such a manner that when the lever is thrown up by the opening of the door or window, (to the casing of which the instrument is attached) and the pallet left free to be acted upon by the escape wheel, the lever will be secured by a catch when thrown off. The object of this is to prevent burglars, after entering a door or window, to stop the alarm. A button is also attached to the door, and so arranged as to act upon a lever and sound the alarm when the

## Mouldings

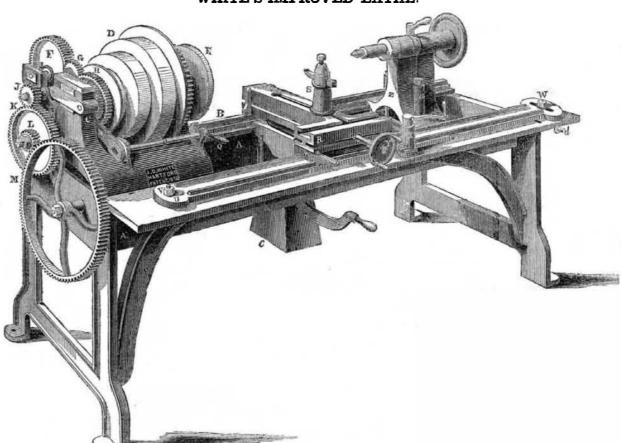
zed with violent hemmorage. Her condition action manifested itself so violently, that the Co., N. Y., has invented some good improveseemed desperate. Death appeared immi- physicians were seriously alarmed. It seemed is much used for welding purposes, also as a vements on machinery for making sash and as if death might result as well from too much wash for the hair, and as a gargle for diseased nent, inevitable. mouldings, for which he has taken measures Doctor Delorme suggested transfusion .---too active vitality-as from vitality too throats. to secure a patent. The cutter is formed of This was at first combatted by the other phy- much exhausted and enfeebled. But a calmtwo circular plates placed on the same shaft, sicians as offering no chance of success, but ing potion soon diminished this unnatural ac-Ontario and Huron Railroad. and so arranged that the said plates may be was finally assented to, as, the case being a tion, and the patient has since been regularly set at a greater or less distance apart as desired in order to cut different mouldings. The cutters are adjusted by set screws. He also employs shields which prevent the feed rollers blood necessary to the operation. A syringe set down as complete. from forcing the stuff against the cutters, was immersed in warm water and kept there when acting upon the end of the stuff to The America till it became of a temperature a little higher be cut out. The shields also prevent the rol-Quite an interesting discussion has sprung than that of blood in circulation. The proper lers from loosening the grains of the wood, vein in the arm of the sufferer was then open up in the columns of the London Mechanics' and also from forcing out pieces from the end ed, and a fine canula, or tube, was introduced Magazine, respecting the merits of the model of steamers on Lake Ontario. of the rough material. to some length. The other end of the tube of the Yacht America. It seems to be concewas then fitted to the syringe, which was en- ded (and how could they help it ?) that she is Rossuth. Improvement in the treatment of Calf Skins veloped in warm towels, and in which was much superior to any of the British-built During the Process of Tanning. the necessary quantity of pure human blood. Yachts; J. Scott Russell comes out upon the 'Mr. Henry Halsey, of Windsor, Hartford The operator then gently forced into the veins strength of it, and other vessels he has built, Co., Conn., has taken measures to secure a of the dying woman the revivifying fluid. patent for a very valuable improvement in him a spirited reception. At this moment, as she afterwards declared wave line theory. the treatment of calf skins during the process

of tanning the hides, whereby the hacks are removed, and finished skins for boot and shoe uppers rendered much more marketable. The Mechanics' Magazine, that Messrs. Harrison the moving magnet. The larger the engine, improvement although it removes the hacks, have provisionally registered a new electroalso renders skins more uniform in thickness, therefore they are much smoother. The improvement will no doubt soon be introduced into the art, for the manufacture of upper leather is one of the most important in our country. Every improvement should receive prompt attention from the trade in general.

New Electro-Magnetic Engine. We learn by the last number of the London magnetic power of compound coils which they can obtain any length of stroke by reci- steam; we do not believe it."

## WHITE'S IMPROVED LATHE.

procating action, and they reduce the effect of the secondary currents to retard the motion of the greater is the economy of it stated to be. magnetic engine, which appears in principle They have got the principle of Prof. Page, not good. It is said to consist of induced but have not such a good arrangement. They are a little behind him with their invention draw within a suitable aperture, or repel although they state that they have been expetherefrom a series of plates of soft iron, or rimenting for years. The inventors state permanent steel magnet. The inventors state | t they have obtained a power cheaper than



The accompanying engraving represents a standard of the gearing; D is the train of movable guide way is reversed quickly by a Lathe of Mr. J. D. White, of Hartford, Conn. pulleys; E is the live centre; E G F J K L pinion on Y, working into a rack, b, on the a patent for the principle of taper cutting being granted to him on the 21st of May, 1850. the different kinds of turning, &c., to give the weight. Q is a handle to operate the rod, P, the lathe is one of the best construction, and the workmanship is of the best description. On page 267, of Volume 6, is an engraving of Mr. White's double lathe for turning the axles of railway cars: an account of the nature and principle of this invention, is there set forth, and it requires but little to be said about that act on the article to be turned; Z is the evident. By using a card of reference, this at this time. This is a view of the principle applied to the single lathe. That principle is a movable slide to guide the rest, and which fasten it down on the table; U is the movable can be set at various angles so as to turn tapes, and at the same time it is equally as good as any other lathe for every kind of work a lathe can perform. B is a slide on one side; the the movable end. It works in the slot, the manufacturing these lathes. He produces other is covered by the way. C is a fixed use of which will at once be perceived. This none but the very best work.

### Transfusing of Blood.

M are the train of gear wheels and pinions for edge of the guide way. c is the draught The engraving is a perspective view, and requisite velocity to the screw shaft, and and an eccentric lever, N, to throw the gears he lathe is one of the best construction, and M is the gear wheel of the same. This shaft in and out, with pinions on the back shaft, for passes through the screw eye on the slide changing the velocities as mentioned; d is a rest, (but which cannot be seen) in the usual screw for setting the movable guide way in way. R is the slide rest; S is the tool stock and out to the proper distance. This lathe with the cutter inserted in it; Y is the screw is well adapted to chucking, and its utifor setting the tool at the proper distance to lity for parallel and taper turning is selfmovable poppet centre head; a is a screw lathe can be set in an instant to cut the same bolt (there is a like one on the other side) to taper a year hence, which may be cut to-day. way to be set in and out at various degrees, to depot, No. 106 Pearl street, this city, where it cut tapers. It guides the slide rest R. V is may seen, an examination of it will be of inits pivot axis. W is a screw to fasten it at terest to all machinists. Mr. White is now

she felt a grateful warmth spread over her Borax. door is opened, or not to be acted upon, as may This very useful article is extensively ma-The French papers state that a very inte- body, without having the reasoning faculty be desired. resting experiment has been lately performed strong enough to trace it to any cause. Soon nufactured in Tuscany: 'no less than 7,500 Improved Machine for Cutting Sash and at the Hotel Dieu of Lyons. A female was aftershe recovered, in a great degree, her sen- lbs. of boracic are produced every day. The brought into the hospital who had been sei- ses and eye sight. A few hours later, a re- revenue amounts to 10,000,000 frances per an-Mr. C. B. Morse, of Rhinebeck, Dutchess

This lathe is for sale at Leonard's machine

num. Borax is a sub-carbonate of soda, and

Ontario and Huron Railroad, conn desperate one, it could do no harm, even if it improving. The last intelligence from Lyons ing lakes Ontario and Huron, we learn from did no good. One of the young aspirants, re states that it is now hardly possible that a the Chicago Democrat, is to be completed in siding in the hospital, offered to furnish the relapse can occur, and that the cure may be fifteen months, at a cost of \$2,000,000 of which \$1,700,000 has already been provided. The western terminus is Goodrich. Immediately after the completion of the road, a line of steamers will run between Chicago and Good rich, in connection with the road, and a line This great patriot, and perhaps the most fluent speaker in the world at the present day, will soon be on our shores. The members of in presenting a good argument in favor of the the press in this city are preparing to give him