

New Inventions.

For Early Risers—Repeating and Alarm Clock.

Mr. H. O. Morrill writes us respecting a notice which appeared in the Scientific American of Dec. 29th, describing a clock, said to be invented by a mechanic in London, which would strike an alarm at any hour to which it was set, and ignite a lamp at the same time, so as to awaken him at any hour during the night, and show him how to dress himself. Mr. Morrill is the inventor of a clock of the same nature, which was exhibited at the late Fair of the Maryland Institute, and we see by the Baltimore Sun that it was noticed:—"No. 81. A brass eight-day and repeating and alarm clock, made and deposited by Mr. H. O. Morrill, of Baltimore. This clock is handsomely got up: it may be set to give an alarm at any moment, and while a man is getting up, it, by the same action, will light a lamp—a convenient article."

It is the first time that we have heard of Mr. Morrill's beautiful invention. We believe that the two clocks is a remarkable coincidence of mechanical invention, both original—the one in America, the other in England. Since the previous article appeared in our columns we have seen the Manchester Guardian, which thus further describes the invention previously spoken of:—

A mechanic, residing at 104 Newcastle street, Hulme, has constructed a little machine for the purpose of awaking himself early in a morning. To a Dutch clock in the kitchen he has attached a lever, from which a wire communicates through the ceiling in the bedroom above, in which he has fixed his novel invention. Having set the lever to any hour at which he may be wished to be awakened, when the time arrives, it is realised by the clock, and the machinery up stairs rings a bell, then strikes a match, which lights an oil lamp. The lamp runs upon four wheels, and it is at the same instant propelled through a tin tube on a miniature railway, about five feet long, which is raised by a small iron support, a few inches above the bedroom floor. Near the end of the "line" is fixed an elevated iron stand, upon which a small tea-kettle is placed, (holding about a pint,) and immediately under it by the aid of a spring, the lamp is stopped, and its flame boils the water in the kettle in twenty minutes, thus enabling him to take a cup of tea or coffee prior to going to his work. The bell attached is so powerful that it awakes his neighbour, and the machine altogether is of a very neat appearance, the mechanism being of polished iron. The inventor has made it during his leisure hours, and has been about eighteen months in bringing it to a state of completion. He has also combined economy with utility, as the working of it does not cost more than a halfpenny.

Valuable Invention.

It is stated, as an illustration of the influence which inventive genius exercise upon manufactures, that some gentlemen in Boston, a short time since, employed an ingenious American machinist to devote some study to a mode of cleaning and separating into different qualities the wool from the River of Platte. The attempt was successful. The machine was produced. The wool was thrown into it and thoroughly cleansed and divided into three kinds good, better, and best, and is thus turned out assorted and cleansed and ready for market or manufacture. The wool costs six cents a pound, and the first sort procured from it is worth forty cents a pound.

[We hope the above is true but do not vouch for it.]

Novel Rat Trap.

Mr. C. Jillson, of Worcester, Mass., has invented a singular rat trap to destroy rats without bait. The trap is placed over a rat hole and as sure as the rat attempts to go through it, he is pierced through with a sharp pointed spear, which is darted into his body. A trap of this kind is quite small, not weighing over an ounce or two to destroy the largest rat.

The inventor is about to secure his invention by a patent.

New Saw Mill.

Mr. Amos Jackson, of Pottawatomie county, Iowa, is exhibiting, at St. Louis, an invention of his—a saw mill which derives its propelling power from the weight of the log to be sawed. The principle is simple, and the invention will do away with all steam and water power saw mills.

[We copy the above from an exchange, and must say that the thing is not impossible when the log has a fall, like the weight which operates a clock, but what is to raise the log? Why, the same power is required to do this that is given out to saw it. In some situations—in fact, in a number, this invention (we think) might be applicable, but steam and water power will still occupy their own domains.]

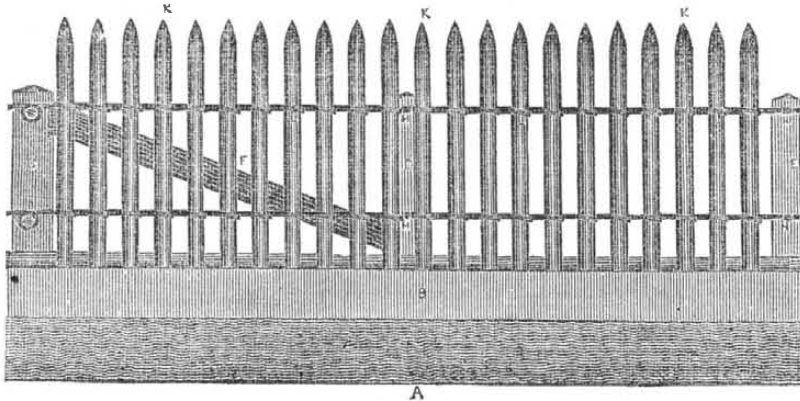
Glasses with Double Vision.

Mr. Gall, of Albany has, after a great deal of labor, succeeded in manufacturing spectacles with two distinct visions in a single lens. The one vision is for ordinary distances, the other for remote. The improvement has been examined by gentlemen skilled in such matters, and they pronounce it "good." So says an exchange.

Courts of Conciliation.

Governor Fish has proposed to the Legislature of New York the establishment of Courts of Conciliation, by means of which parties disposed to a just settlement of their differences can do so amicably, promptly and without the expense of lengthy and tedious suits at law.

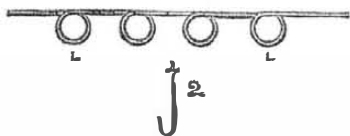
WIRE TELEGRAPH FENCE.—Fig. 1.



This fence is the invention of Mr. Lucius Leavenworth, of Trumansburgh, Tompkins Co., N. Y., and for which letters patent were issued on the 13th of last October.

Figure one is a front view end; figure 2 is section. A is the ground; B is the bottom board; C, D, E, are the posts; K K K are the pickets. L, fig. 2, is the wire; H H are the binding hooks—one hook is represented in fig. 2. The bottom board is bevelled at the top, and the bottom of each picket has a notch in it to sit on the upper edge of the board. This makes the fence very firm. The pickets can be all wired apart from the place designed for the fence; in other words, built in sections, and then the section at the left hand is swung into its place last, and the brace board F, is employed as a lever to stretch and tighten the fence, and make it perfectly firm. The hooks, H H, pass through the posts, to allow the wires to be drawn, and they can be tightened by the

Fig. 2.

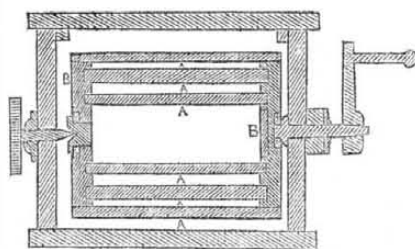


nuts in their heads, like screw bolts. The wires are first secured on the post, C, by the screws on it, so that the whole parts are of the most simple description. The wires are formed by a machine of Mr. Leavenworth, so as to retain the pickets in the most simple manner, like tying them together. The wires are formed

by the machine to suit any kind of pickets.—Cast iron posts, with stone seats, would make a fence that would last for generations. The tennons, in that case, should be of wrought iron well varnished. The pickets can be made of the most durable wood, at but little expense, for a very small quantity of timber will make a very long fence. The parts can be well painted and varnished with a cheap varnish at first, so as to preclude the possibility of rusting or decay for the future. On lands where a moveable fence is required, this fence is just the thing required. In a field of turneps, for example, sheep could be fed during winter in a very simple manner, by allowing them a small portion of the turneps to feed upon, and when that was consumed, to remove the fence to a greater distance, and then let them feed on the next section in the field, and so on, all winter. This fence offers but little obstruction to the wind, consequently no snow wreaths are heaped around it. It will prevent fowls from getting into any garden enclosed by it, and with suitable machinery, where timber is plenty, it is calculated that pickets can be got out for about 30 cents per rod, and the wire will cost about 25 cents. It is a good fence for exportation, and is well adapted for farmers on the western prairies, who generally have considerable ingenuity, and no doubt could build their own fences from the description we have given.

Communications (p. p.) addressed to Mr. Leavenworth will meet with prompt attention.

Telegraph Churn.



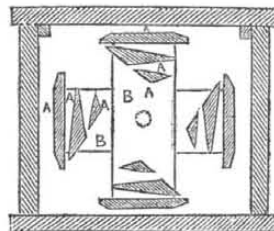
This Churn is the invention of Mr. Z. C. Robbins, of the City and County of St. Louis, Mo. It was patented on June 1st, 1849, and re-issued on the 1st of last January.

Figure 1 is a longitudinal vertical section, and figure 2 is a vertical transverse section. The same letters refer to like parts. The nature of this invention is to agitate the cream or milk by the operation of the rotation of the beaters, (formed for that purpose) like to the action produced by knives for whipping eggs. The specification says:—

I produce this effect by forming the beaters on the agitator, of thin slats or boards, A A,

secured to radial arms, B B, or discs, in such

Fig. 2.



positions as to bring their sides at right angles, or nearly so, with the radii of the agitator. I generally construct the agitator of four series of beaters, as represented in the drawings, each series being composed of two, three, or more beaters, one placed within the other, with narrow spaces between each beater. I generally have the beaters of each series diminish in width from the outermost to the inner one, so as to bring their edges into radial lines from the axis of the agitator, and their rear edges within said line, for the purpose of gathering the butter. The front edges of the beaters are bevelled off nearly or quite, to sharp

edges; their rear edges are blunt, and on a line with each other. When the agitator is rotated in milk or cream placed on the churn box, the sharp edges of the beaters cut into and divide the particles, and gather the milk or cream between their converging surfaces; and as the beaters ascend, they carry up quantities of milk or cream in the spaces between them, which is discharged in thin curved sheets at their rear edges in the atmosphere in the upper part of the churn, in such quantities as to completely envelope the agitator: producing thereby a complete agitation of the whole body of the milk or cream, and a mingling of the minutely separated particles of cream, with the atmosphere in the upper portion of the churn-box."

Unless the agitator is driven at a high velocity, the particles of milk, &c., are not thrown off tangentially. It can operate in a round vessel as well as a square one, and produces butter at the usual temperature, in about ten minutes. When the butter has been made, it is collected into a roll in the centre, by reversing the motion.

We herewith publish the claim of this excellent machine:

"What I claim is the series of parallel floats or beaters, A A, formed and arranged within the agitator, substantially as above described, so that when their motion is reversed, their thick inclined rear edges will gather the butter into a roll in the centre of the agitator, substantially as herein set forth.

Zenas C. Robbins, Solicitor for Patents, Washington City, is the owner of the above patent, who will promptly answer all (p. p.) letters, requesting information in reference to it.

Melsen's Process of Sugar Making Introduced into America.

The Franklin (La.) Banner states that Messrs. Lyman and Todd of that parish have adopted Melsen's process in sugar making and met with decided success. The sugar, according to the Banner, is a splendid article and the contrast between it and sugar made by the old process is represented as quite wonderful.—The sugar yielded but a very small amount of molasses, and what it did yield was uncommonly thick. The process by which this result has been obtained is as follows: A small quantity of the bisulphate of lime was mixed with water, and the mixture placed in a tin vessel over one end of the mill-bed in such a position that a small stream issuing from the vessel would mingle with the cane juice as it passed from under the cylinders to the spout leading to the cistern. By this means the fresh juice, as soon as it left the cans, mingled at once with the liquid, and such is the character of the bisulphate of lime that it at once neutralize every tendency to acidity that previously existed in the juice. Professor Melsen is of the opinion that the moment the juice leaves the cell of the cane it commences changing to an acid, and that if the bisulphate of lime is at once mixed with it, this tendency, so injurious to crystallization, is at once destroyed.

Action and Reaction Elastic Joint.

Mr. Levi Bissell, an excellent machinist of New York, has invented an improvement in making an elastic joint, or a bearing, to be an assisting medium between the power and resistance, or at those points where a change of motion takes place, such as the connection between the rod and the crank pin, and this makes it an improvement of great value for locomotives and marine engines. The bearing or joint in the link of the connecting rod, is placed between thin plates on both sides, which have an elastic medium between them of india rubber, or some such suitable substance, all firmly secured by the straps, and can be keyed or graduated by a screw. It will allow the crank pin to be firmly clasped, and enable the joint to work sweetly. At the point of action and re-action, it will graduate the breaking force, thus preventing shocks in the rods of pumps, and the breaking of straps on the links. One of these is about to be placed on a large locomotive on the Baltimore and Ohio Railroad. We will try and present an engraving of it at some future day not far distant. A patent is applied for.