

Science and Art.

A Hint to Farmers.

We have often been much surprised by noticing on farms otherwise perfect, that there was a want of regularity in the planting of the trees, vegetables and grain, and so we suggest that regularity in planting is one of the surest means of obtaining a good and equable crop. Even though it costs a little more labor at first, the fruit will amply repay. Give an equal share of soil to each root, and rather plant too little in a field than too much.

A Correspondent on Boiler Scale.

We have received a small box from C. C. Halladay, of Utica, Ill., containing incrustations three-eighths of an inch thick taken from the inside of a steam boiler. He says, in a letter accompanying them:—"The agent we use to destroy the scale is slippery elm—thanks to your journal for the information. As long as I live, you will be sure of one subscriber, and all others that I can induce to subscribe."

We do not doubt that twice the quantity of fuel will be required to generate steam in any boiler having such incrustations, in comparison with the quantity consumed beneath a clean boiler.

Detecting Incipient Fires in Ships.

On page 221, this volume, we published some very useful remarks regarding spontaneous combustion, and described a simple apparatus invented by Dr. Hay, Admiralty Chemist at Portsmouth, Eng., for detecting an increase of heat in the holds of ships and in close rooms. In answer to the information there presented, we have received a letter from Henry D. Fish, of Milford, Mass., in which he describes an apparatus similar in principle, but somewhat different in construction from that of Dr. Hay, for accomplishing the same objects and which he invented in October, 1856.

We would recommend Mr. Fish to devote more attention than he has yet done, to the general introduction of his invention, as the object designed to be accomplished by it is a good one.

Guthrie Center, Iowa.

The citizens of Guthrie Center, Guthrie Co., Iowa, have just made a move in the right direction, and one which cannot fail to have a very beneficial effect on the future of this young town, one of the most inviting in the West. They have taken measures to establish a Mechanics Library and Reading Room, and we are pleased to state that the SCIENTIFIC AMERICAN is among the first papers ordered. They have also directed E. B. Newton, Esq., of Guthrie Center, to give mechanics and others who may desire it, such information relative to the place as will be useful to those who may be desirous of trying a western home. Here, then, we have a frank acknowledgment of the worth and claims of the mechanic, a fact which indicates that the people of Guthrie Center understand that to encourage their mechanics and the mechanic arts is the most direct way of insuring their own success and prosperity.

Improved Pea Sheller.

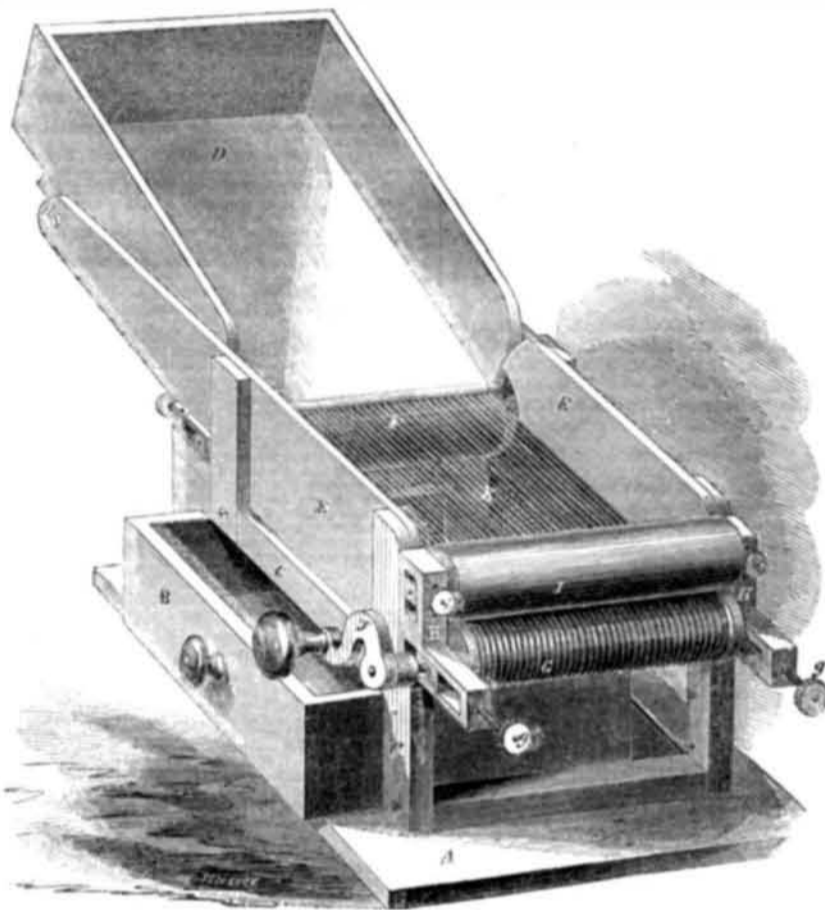
Shelling peas for preserving or cooking is a tedious and somewhat laborious process, and as this vegetable is of no use until the shell has been removed, it is desirable that we should have some means or appliance by which we can easily remove the shell without in any way damaging the pea. Our engraving represents a sheller which fully accomplishes, by simple means, all that it is designed to do. It is the invention of W. J. Stevenson, of New York, and was patented by him March 30th, 1858.

A is the board on which it is placed, or the base from which rises the frame, C, carrying the drawer, B, and sides, E. The hopper, D, into which the peas are fed is supported on an axle, *d*, and it has a shaking motion given to

it by means of the cams, *f*, on the roller, F. This roller, F, has around it a number of endless bands, K, which serve as conveyors for the peas, and pass round the roller, G, which may be grooved or otherwise, to keep the bands in position; the roller, G, is rotated by a handle, J. Above the roller, G, is a plane roller, I, placed somewhat behind, G, but yet in contact with it. I and G rest in the bear-

ings, H, and the three rollers are put in any position, and the endless bands kept in any degree of tension by the screws and sliding journals, *ig f*. The operation is as follows: When the peas are shaken out of the hopper they are brought by the endless bands to the rollers, I and G, and here it is necessary that the shell should be drawn through, but that the bite of the rollers should be so small as to

STEVENSON'S PEA SHELLER.



have a tendency to reject the peas and not draw them through. This difficulty is overcome in a very ingenious manner, the roller, I, being, (in relation to the peas) a little in advance of G, first comes in contact with the pea pod, this it presses down upon the endless bands, which being somewhat elastic, yield and split the pod, thus presenting the pod to pass between the rollers, I G, so that it will be

drawn through and crushed, and at the same time the peas will be forced through the interstices of the bands into the drawer, B, beneath. To farmers who grow peas for seed, and market gardeners who prepare these healthy and nutritious vegetables for sale, this machine will prove invaluable, and they may obtain any further information by addressing the inventor, 438 Third avenue, New York.

Londinsky's Sad Iron Holder.

Fig. 1

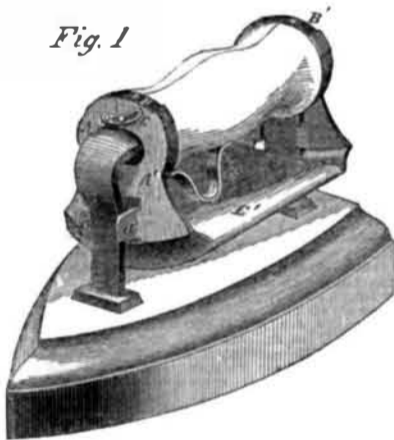


Fig. 2



That domestic trouble, the washing day, often has its difficulties doubled by the burns and bruises which the laundress gets on her hands during the process of ironing. The method which careful housewives adopt to remedy this evil, the amount of paper they

carefully fold together the day before, or the busy way in which the fingers of the juveniles are employed in stitching together pieces of cloth for the purpose of holding the sad iron, are often truly amusing; how grateful, then, will housekeepers be to us when we inform them that such trouble is no longer necessary, and that a simple little iron holder has been invented by Leon Londinsky, of New York, and patented by him June 2nd, 1857.

Our engravings illustrate the invention, Fig. 1 being a perspective view of the holder on the iron, and Fig. 2 being an end view of the holder only.

A A' are the two ends made of zinc or other metal plate, and turned over to admit two pieces of spring, B B', one at each end, between them and the handle, which is in two pieces—being cut through the center longitudinally; C is a small slotted piece fixed to the half end, A, in which works a pin on the half, A', that prevents the handle being opened beyond the tension of the spring; E E' are two pieces of wood attached to the bottom of the ends that serve as a shield to prevent the knuckles being burned by the radiated heat from the body of the iron; *a a* are parts of the end pieces turned at right angles to the end, and they being on each side of the iron handle, hinder the holder from shaking round the iron. The operation is simple:—The handle is grasped by the hand, the thumb and forefinger being passed through the loops seen in Fig. 1, the holder is then opened as in Fig. 2, and passed over the handle of the iron and the force of the spring is allowed to close it, and the iron is held firmly without fear of

burning, as wood is interposed between the hand and the hot handle of the iron, and also between the hand and the body of the iron. The cost of manufacture of these useful additions to household economy is very trifling, and the patent with full machinery for their production is for sale.

Any further information can be obtained by addressing Messrs. Harris & Jacobson, 67 Nassau street, New York.

Book on the Sale of Patents.

We have received several letters inquiring of us if we know anything about the firm of Cornwall Bros., who are advertising in the SCIENTIFIC AMERICAN a book upon the sale of patents. Complaint is made that letters containing remittances for it are not answered. In some instances blame has been imputed to us for permitting the advertisement to appear in our columns. Now in regard to the firm above mentioned, we know nothing more of it than what is contained in the advertisement, and if those who seek to cast censure upon us will but exercise a little reflection, they will see that we cannot possibly vouch for the character of all the advertisers who make use of our columns. The gentlemen referred to will no doubt be able to make a satisfactory explanation.

The report of the building of the lighthouse off Belle Isle, Coast of France, and a statement of its stability by Leonor Fresnel, engineer of the works, has been translated and published for the benefit of the United States lighthouse service.



INVENTORS, MANUFACTURERS, AND FARMERS.

THIRTEENTH YEAR!

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