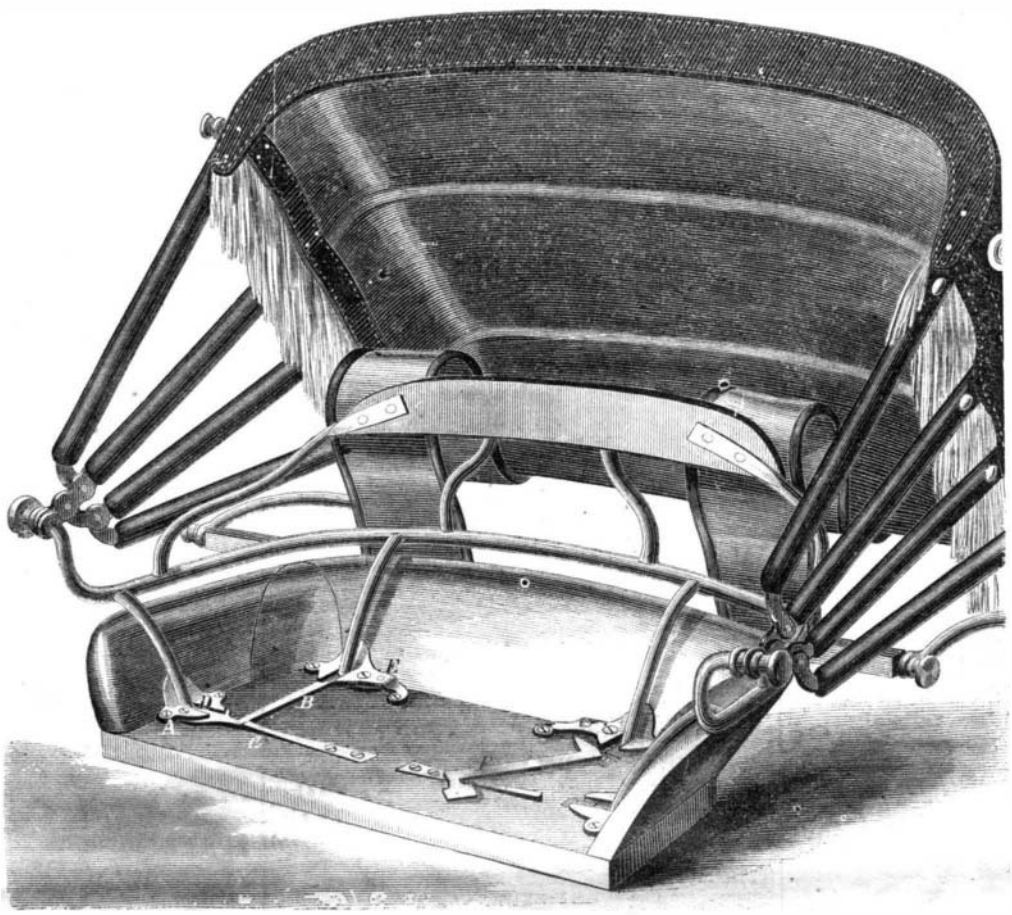
### Shifting Top for Wagons.

To those who are not able to have several vehicles for use in all kinds of weather, the shifting-top device lately invented must prove very convenient, since a top wagon is converted into a no-top buggy, or the reverse, in a few minutes and with little labor. The parts are the same in number and character as in all top wagons; but instead of being permanently fastened, are capable of being changed, as before-mentioned.

We here illustrate one of the shifting tops alluded to. The details consist of a series of brackets, A, fastened to the seat of the wagon, and dogs, B; in connection with the latter are the springs, C. The top is held in place by inserting the feet in the brackets, A, and shifting the dogs, B, so that they fall in between the two parts, as shown at D—one dog serving to confine both legs. The dogs are jointed to the bracket, E, so that they cannot be lost, and when in place are held there by the springs. To remove them it is only requisite to depress the spring and move the dog on one side, as shown at F. The top can then be lifted off and laid on one side.

A patent is now pending on this invention through the Scientific American Patent Agency. For further information address F. B. Morse, Milwaukee, Wis.




MORSE'S SHIFTING TOP FOR WAGONS.

### The Trichina.

The Detroit *Tribune* says that one case of the disease called trichina, which has recently excited much alarm in Berlin, Prussia, has appeared in that city and proved fatal. The victim was a German young lady. *Trichina spiralis* is a small microscopic worm or animalcule, which is found in the muscles and intestines of various animals, especially pigs and rabbits, in such enormous quantities that in a single ounce of pork 100,000 of these animalcule have been found. By partaking of the meat infected with them they are transferred to the human body, causing intense suffering, followed in many cases by a painful death. These animalcule are not destroyed by smoking or by frying pork, but hard and long boiling is necessary.

We learn by the London *Lancet* that at Hedersleben, in Prussian Saxony, upward of ninety deaths have occurred from this disease, while the number of persons attacked has been several hundred. All this havoc has been caused by one trichinous pig! The butcher, having recognized the abnormal appearance of the meat of this pig had carefully disguised it by mixing it with the meat of two healthy pigs or added it in small pieces to larger joints of pork to make up weight. He made this confession shortly before his death, which was caused by trichiniasis contracted from his own meat. His wife also died of the disease.

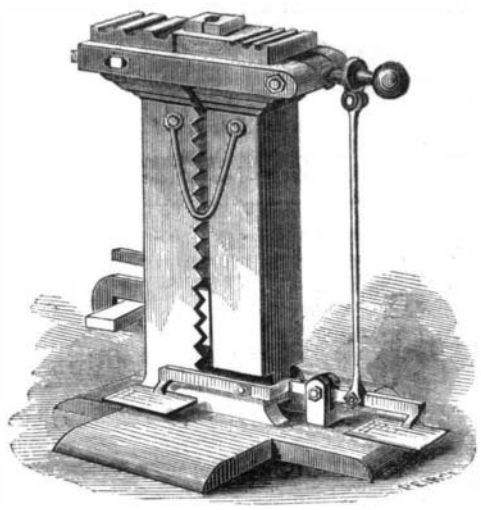
### A $25,000 Tree.

In the month of January, 1866, a remarkable tree was brought to New York from a Western State, which is considered by the best judges to be worth $25,000. No foreign tree was ever brought here of so great value. This was a black walnut tree 70 feet long, measuring board or inch measure 4,500 feet; but when cut into veneers it would be 30 times that, making 135,000 feet, which at 20 cents would be $27,000. The cost of cutting, carting and placing in store for sale, would be about $700.

There are other kinds of trees also in this country which are valuable for manufacturing purposes, as well as for fruit and shade, of which black walnut has for the last six years been gradually taking the lead of mahogany, and is worth now as much as mahogany was formerly. The figure most sought for at present, is a stripe which seems to be formed by the saps, casting dark and light shades alternately through the tree, which, when worked, makes the most beautiful furniture that is manufactured. A tree worth $10,000 is not often found; bnt one worth $25,000 is harder to strike than oil. Our forests abound in trees of great value, and the wealth that is in them is scarcely yet begun to be developed.

### DAVIS'S BOLT HEADER.

The method of making machine bolts, now practiced, is to cut the iron long enough to form a head,



heat it white hot, and then upset the iron on the end by repeated hammering until it fills the die it has been placed in. This make a solid, firm head, far better than the old way of welding on a collar and subsequently swaging it to shape.

The machine shown in this engraving is one well adapted for the purpose; it is strong, solid, and conveniently arranged, and bolts of great length can be headed up as well as short ones. This saves the weld, which is generally made five or six inches from the head, in bolts for bridge making and similar work. The machine appears so plainly that little is needed by way of letters of reference. It consists of a solid cast-iron block, fitted with a die on top for holding the iron, and a block underneath for supporting the end of the iron while the head is being made. This block can be moved up and down, set at any point, and then keyed up—the several parts, in connection with the key, holding it firmly together. The dies are opened for the insertion of the iron by a treadle at the side, and closed again, to hold it fast, by another in front, and swages both half round and hexagonal are cast at the top, for obvious purposes. This is a most convenient machine and is in use in many of the largest and best-appointed machine shops in the country.

For further information address L. L. Davis, manufacturer, Springfield, Mass., by whom it was patented Feb. 6, 1866.

### The New Cable.

The new Atlantic cable, now in course of construction by the Telegraph Construction and Maintenance Co., has the ten sheathing wires galvanized instead of plain. With this exception it is of the same make in every respect as that laid last year. Individual wires are weakened slightly by galvanizing, but in the case of the cable it is said that additional strength is given—that the wires instead of snapping, yield till the strain bears also upon the surrounding hemp, so that, in fact, the breaking strain of the cable is increased to nine tuns.



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