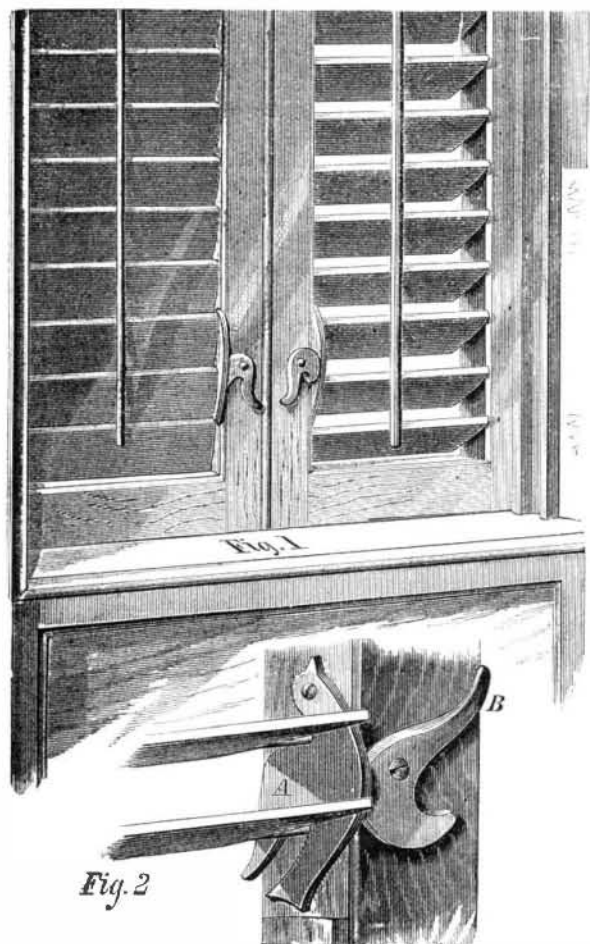


STELLER'S BLIND SLAT HOLDER.

We illustrate herewith a novel and simple device designed to hold the slats of a blind in any desired position. Owing to the shrinkage of the wood, and wear, slats as a rule become loose, so that it is impossible to place them so that a gust of wind will not alter their position. In summer it is always desirable to tilt the slats so as to shut out the sun, or to open them so as to admit currents of air; while in winter, the slats, tightly closed, are an additional protection against the cold.



The invention, which is shown attached to the blinds in Fig. 1, and enlarged in Fig. 2, consists of a plate of metal, A, fastened to the stile, and between the latter and the slats, by means of a single screw at its upper extremity. This screw holds it loosely so that it may easily be pushed outward and jammed against the edges of the slats by the cam button, B, after said slats are adjusted as desired. The slats are thus firmly held and cannot be moved or opened from the outside.

There are no springs or other mechanism to get out of order. The device is subject to no hard wear, is ornamental, and is easily affixed to the blind frame.

For further particulars in regard to agencies for selling the invention, address the patentee, Mr. C. E. Steller, 352 East Water street, Milwaukee, Wis.

SMITH'S IMPROVED AWL.

We illustrate herewith a novel improvement in shoemakers' awls, whereby the usual bristles on the waxed ends are rendered unnecessary. The instrument is made with a notch, A, inclined toward the point, and a notch, B, inclined in the opposite direction. The thread has one end inserted in the notch, A, and is pushed through the leather with the awl. Before withdrawing the latter, the other end of the thread is placed in notch, B, and the instrument is retracted. The effect is to form a stitch precisely the same as that made with the waxed ends and bristles, while the cost of the latter is saved. The sewing, we are also informed, is accomplished much more rapidly. The end of the tool is made flat, and the adjacent edges ground sharp, so as to facilitate penetration. The inventor states that he has had this awl in practical use for some time, and that its operation is uniformly successful.

Patented through the Scientific American Patent Agency, March 30, 1875. For further particulars address the inventor, Mr. Sylvester A. Smith, Letts, Louisa

county, Iowa.

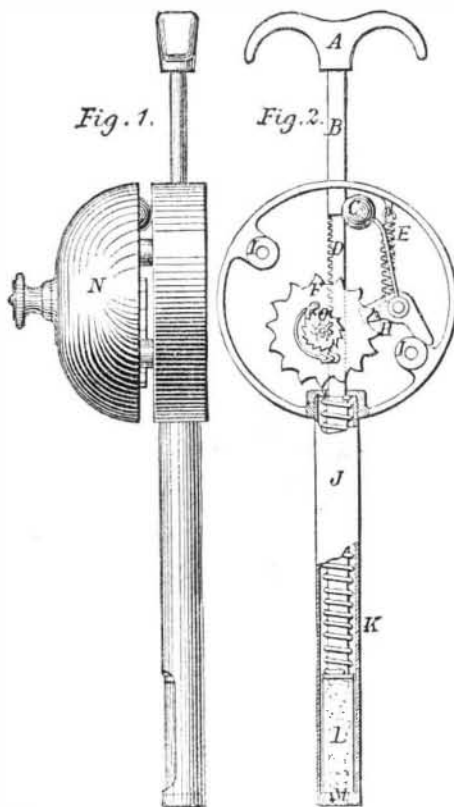
The Gas Wells of Pennsylvania.

The *National Oil Journal* says: "There is little doubt that the gas escaping constantly from oil wells is of nearly or quite as much value as the oil itself; and it is a matter of wonder that means have not long since been adopted to util-

ize this immense product of the earth. No estimate can be made of the quantity of this gas, which has for years been allowed to pass away into the air uselessly; but the yield of a few gas wells which have been tubed and their product utilized indicates that it is enormous. A gas well near Sarversville, in the Butler oil region, flows with a pressure of 300 lbs. to the square inch, and is roughly estimated to yield a million cubic feet of gas every 24 hours; and this is only one of quite a number of large gas wells, and almost numberless small ones, for it must be remembered that every well which produces oil also yields gas. A survey has just been completed for a line of pipe from Sarversville to Pittsburgh, a distance of about 17 miles. It is proposed to lay a six-inch pipe between the points named, and to supply the gas to manufacturing establishments as a substitute for coal for fuel in Pittsburgh."

ALLEY'S BEARING FEELER.

We subjoin an engraving of a very useful instrument designed and constructed by Mr. Stephen Alley, of Glasgow, Scotland, for giving a prompt indication of a hot bearing. The apparatus consists simply of a brass tube, J, which is placed in a hole bored in the cap of the bearing to receive it, the bottom of the tube touching the shaft. At one side, near the bottom, the tube, J, is partly cut away so as to admit of the ready insertion of a cylindrical plug, L, formed of a hard grease, or of a composition which will melt at the temperature at which it is desired that the alarm should be given. To insert the plug, L, the handle, A, is pulled so as to draw up the spindle, B, and thus by compressing the spring, K, making room between the bottom of the spindle and the bottom of the tube for the plug to be inserted. If the bearing becomes heated, the plug, L, begins to melt, and escapes



drop by drop through the hole, M. As this melting takes place, the spring, K, forces down the spindle, B, and in so doing gives motion by the rack, D, to the pinion, G, and thence by the ratchet, O, to the striking wheel, F. This wheel, as it revolves, operates upon the pallet, H, and alternately draws back and releases the hammer, C, which, when released, is made to strike the interior of the bell, N, by the action of the spring, F.

The instrument, says *Engineering*, gives a number of clear and distinct signals as the composition melts, and can scarcely fail to call the attention of the engineer. It is, moreover, a very simple apparatus, and there is nothing about it likely to get out of order.

The American Institute Fair.

The usual announcement of the coming American Institute Fair will be found in our advertising columns. The Institute's building on Third Avenue and 63d street will be open for the reception of machinery on August 15. Other goods will be received after August 29. The exhibition will be made public on September 9.

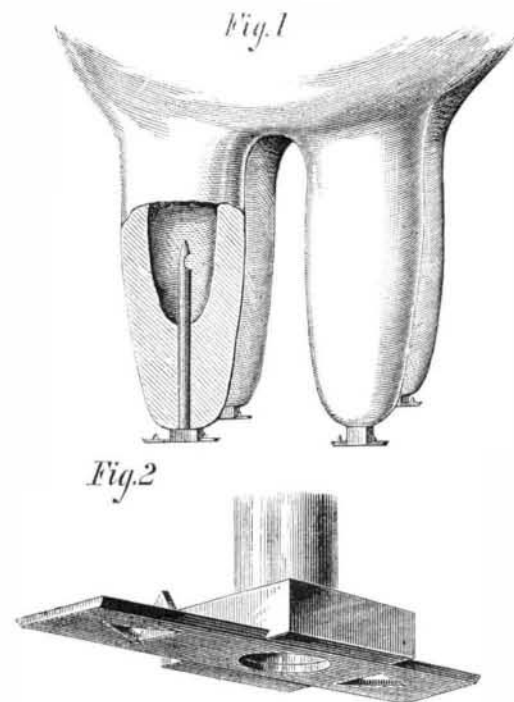
We have come to regard the day, officially fixed, as that on which the Fair is supposed to be complete and ready for public inspection, as a mild species of fiction never by any chance realized. As for the show being then fit for examination or anywise approaching such condition, we have never found it so, and therefore expect no departure from the usual practice this year. The managers lay the blame on the exhibitors, and *vice versa*. The public cares not a straw for the quarrel, but it certainly has a right to demand a respectable exhibition in return for its money; and it justly objects to being deluded into paying fifty cents admission fee, for the privilege of gazing on a muddle of packing boxes, amid the din of hammering and saws.

We counsel intending exhibitors to apply for space at once; and at the same time take this early opportunity to commend the foregoing hint to the Fair managers, assuring them that it would, on the other hand, afford us a lively satisfaction to be enabled to chronicle that the forty-fourth annual exhibition of the American Institute, unlike its predecessors, was submitted to the public on the appointed day, complete.

IMPROVED MILKING TUBES.

Mr. Sylvester A. Smith, of Letts, Louisa county, Iowa, has patented (May 25, 1875) through the Scientific American Patent Agency, a new mode of extracting milk from the udders of a cow or other animal, which consists in inserting into each teat a tube, open at the upper but closed by a valve at the lower end. The annexed engraving shows the construction of the device, which is represented in position on the teat in Fig. 1.

An aperture in the end allows of the entrance of the milk, which escapes beneath and runs into the pail when the simple sliding valve, shown enlarged in Fig. 2, is opened. The tubes do not annoy the animal, which speedily becomes accustomed to their insertion. They are claimed to save all the labor of milking, and to accomplish that operation with



greater rapidity, since the usual squeezing process by the hands is done away with, and to extract every drop of milk which may be contained in the udder. The tubes are neatly made of German silver.

For further particulars, the inventor may be addressed as above.

Ingenuity of the Esquimaux.

The Esquimaux have been credited for having considerable inventive and constructive skill. Their boats are ingeniously made, and their ice huts are arched on correct mathematical principles. A recent writer describes a cruel but novel method in use among them for killing bears. They sharpen the ends of a piece of whalebone a foot or more long, then bend it double, and wrap it closely in fat meat, which is exposed to the air till it freezes. These treacherous pellets are thrown to the bear, who bolts them down. They thaw in his stomach; the bent whalebone straightens, and the sharp points pierce his vitals, when he is readily captured.

CAVENDER AND DALLAS' CORN HUSKING IMPLEMENT.

Messrs. William T. Cavender and John T. Dallas, of Auburn, Kansas, have recently invented a corn husker, which consists in an iron or steel rod, bent to adjust itself to the hand and wrist, and provided with a curved end, whereby the husks are stripped by thrusting the curved end through them.

In the engraving, A is the husker proper, formed from a small rod of iron or steel, bent as shown, so that, when the husker is placed between the forefinger and thumb of the right hand, the end, a, of the husker will rest at the under side of the junction of the hand with the wrist; and thence it extends upward, parallel with the thumb, until the end is curved in a spiral form, terminating in a point, b. The husker has fitted to it a strap, B, one end of this strap being confined to it in any desirable way, and the other end being provided with a metallic loop, c, which hooks into the hook, d, at the end, a, of the husker. The husker is operated by seizing the ear of corn in the left or right hand, the husker being attached to the other hand in the manner above mentioned; the corn is thrust through the husks, stripping the husk from the ear in a rapid manner and without injury.



ACCORDING to Professor Le Conte, the rate of growth of corals in the Gulf of Mexico is from $3\frac{1}{2}$ to 4 inches per annum.