

## LOVELAND'S DOUGH KNEADER.

The object of this machine is to facilitate the labor of kneading dough for bread and pastry; it is well known to housekeepers that this is one of the most tedious and exhausting duties they have to perform. The design is to work the leavened mass as thoroughly as possible, so as to render it light and spongy in texture. To accomplish this the apparatus consists of a set of rollers, A, one being fluted longitudinally, the other being grooved so that the grooves cross the fluted parts of the upper roll. The ends of these rolls are fitted in a standard, B, at the side, and provided with an elastic band, C, which keeps them in contact, but also allows them to rise readily as the dough is passed through.

The operation is obvious. When the handle is turned the rolls are revolved and the dough is drawn



in between them; the motion is then reversed, and the same process takes place, being repeated as often as deemed necessary. All parts of this machine are easily taken out and cleaned, should dough adhere, and it may be also used for working butter.

It was patented through the Scientific American Patent Agency by J. C. Loveland, on Jan. 16, 1866; for further information address him at Springfield, Vermont.

## The American Institute.

The usual quarterly meeting of the members of the American Institute was held Thursday evening Feb. 1st, at their room in the Cooper Union—General Wm. Hall occupying the chair.

After the reading of the minutes the reports of the committees were in order. The Committee on Manufactures, Science and Art reported, among the objects brought to their attention, a self-recording barometer, which marked the slightest variations of the atmosphere and printed the fact at the same time. The improvement was applicable, and would be applied to the thermometer.

The Committee on Agriculture reported that a great deal of interest had been manifested in the meetings of the Farmers' Club. Twenty-five thousand packages of seed had been distributed during the past year—a proof of the growing popular taste for floriculture. The report closed with complimentary allusions to the late Prof. Mapes.

The report of the Board of Managers detailed an account of the operation and results in connection with the annual fair, which, in its success, particularly in the matter of machinery, had surpassed expectation. The total receipts were \$29,255, against

a disbursement of over \$26,000, but the surplus for the treasury was about thirteen hundred dollars.

A motion to accept the report and place it on file was followed by a motion to amend, by referring the financial part of the report to the Committee on Finance for investigation.

Mr. Godwin during the prevalence of the matter under consideration was desirous of making some observations. He charged the managers with incompetency, but was declared out of order.

A scene of some confusion ensued, during which considerable misapprehension seemed to exist in the meeting as to which was the exact motion before it. At length the report was accepted and amended.

The Committee on Commerce next reported. The question of the relative economy of steamers or sailing vessels had received their consideration. For coasting trade and internal navigation there was no question as to the preferableness of the former; but in cases of long voyages it was doubtful yet whether steam had any advantage.

A communication was read from a resident of Jersey City claiming that, in awarding the medal for a certain steam pump at the last fair, there had been a violation of the by-laws of the institute, which prohibits the award of a medal to any member of a committee.

Mr. Dawson hoped that the trustees, to whom the matter was to be referred, would also consider the case of a certain pianoforte company to whom a gold medal had been awarded.

The Chairman said he knew the meaning of the movement, and that it was an insult to himself.

Mr. Dawson—You say it is an insult?

The Chairman—Yes, sir, I consider it as an insult. As to the pianos, I have nothing to do with them except to sell them, as I would anything else.

The communication was referred.

Mr. Rich moved to instruct the secretaries to prepare and have printed a list of the members of the society.

Mr. Bull said there was already a great deal of work on the hands of the secretaries. Besides, what motive was there for so doing.

Mr. Rich wished to know what objections there was against it.

Mr. Bull expressed his belief that there was a covert reason for requiring the list.

Mr. Rich said that he could explain the reason, and implied that it might not be very agreeable to state.

Several motions and amendments succeeded each other during a very stormy time, accompanied with personal remarks, and attended with a rather acrimonious debate. At length the motion was referred to the committee having the printing of the by-laws in charge.

Mr. Dawson now arose and read a paper, in which he complained and charged that there had been a violation of the by-laws as above in the award of the pianoforte medal and a certain other medal, and moved a resolution that the Board of Trustees examine the matter.

The consideration of the resolution created another exciting scene.

Mr. Dawson in response to a remark from the Chair, said he hated to see sneaking even in gray hairs.

The Chairman repelled any imputation of sneaking.

Cries of "order," "order."

The resolution was finally referred.

The Nominating Committee next reported. Horace Greeley was their choice as candidate for the presidency of the Institute at the ensuing election.

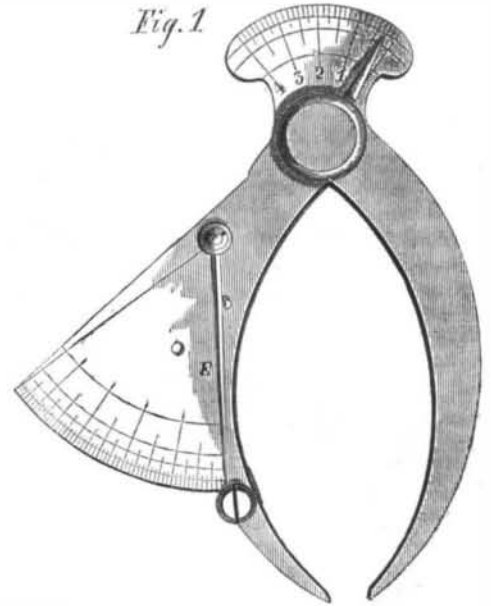
The meeting then took a recess until Friday evening, Feb. 2d, to act upon the nominations reported by the committee.—N. Y. Herald.

## SOPER'S REGISTERING MICROMETER CALLIPERS.

It is surprising that, with the universal use of callipers among mechanics of all trades, so little attention is paid to the proper application of them to the work. All good workmen are careful to have their callipers made with free working joints, kept well oiled, and so fitted as to move equally at all points; but it is not at all uncommon to find great, stiff, rough-jointed, thick-ended callipers, that will not move except with

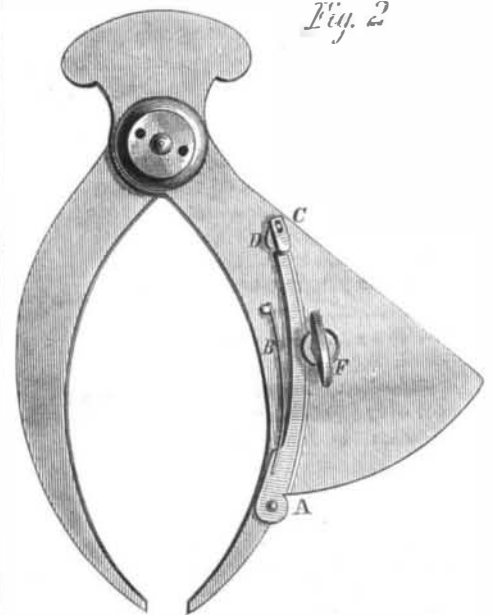
a jerk, and that are quite unreliable to do any work with. Moreover, too much pressure is applied to the tool, and it is often forced over a shaft to try the size. No conclusion can be arrived at in such cases, and the result is a misfit, or a half day's filing on the part of the finisher to correct the error of the turner.

Fig. 1



The callipers here illustrated are perfect. They are not fit for rough handling, but for nice workmen they are indispensable. They register the size the points open to, as may be seen by referring to the index over the joint, Fig. 1, and also indicate the degree to which the legs are sprung over the job, so that the workman can see at a glance whether he has made the work the right size or not, and just how much he is springing the legs apart. This end is achieved in the following manner: One of the legs is made separate from the body of the tool and is jointed to the same, as at A. The back of this independent leg is provided with a spring, B, and jaw, C, the latter fitting over a small crank, D. The shaft of this crank has the index finger, E, attached to it as shown in Fig. 1. It is easy to see, therefore, that when the legs are sprung over the work, the independent leg will act on the index needle, and cause it to move over the plate, thus showing the amount of variation from the true size, unerringly. This tool is on the same principle as the micrometer gage used in watch work, to

Fig. 2



measure with great nicety. The independent leg can be fastened at any time by the thumbscrew, F, so that it is an ordinary pair of callipers. This is one of the neatest as well as most substantial tools of its class that we have seen. The implement sent here was beautifully finished; if the inventor furnishes as handsome goods to the trade he will become famous.

Application for a patent pending through the Scientific American Patent Agency. For other information address Philo Soper, London, Canada West.