

A Disease from Reeds.

A curious affection has been occasionally met with in certain parts of France, especially in Provence, among reed workers, chiefly those who manipulate the stems of *Arundo donax*. A case at Frontignan (Herauld) has lately been very carefully studied by M. Baltus, of Lille. A man, aged forty-seven, and his son, aged seventeen, had been at work for several hours loading a cart with reeds, which had been cut a year before, and kept in a damp trench. Both were seized with painful irritation of the nose, eyes, and throat, followed by erythematous swelling in the same parts, which extended to the hands, trunk, and genital organs. A number of acuminated pustules appeared on the red swollen areas, the conjunctivæ were injected, the eyes streaming, and there was a slight cough. The next day four other persons—three adults and a child—who had come in contact with the reeds deposited at the farm, presented the same symptoms, although in slighter degree.

Moreover, four cats and three dogs which had frequented the same reeds presented red painful crusts about the nostrils. In every case the disease ran a mild course, and disappeared in a few days, under the influence of wet compresses. An examination of the reeds showed that they were covered with a mould consisting of the spores and mycelium of a fungus—*Sporotrichum dermatodes*—which had developed under the influence of the prolonged exposure to moisture. The spores had been shaken off as dust during the manipulation of the reeds, and had irritated the exposed parts of the skin on which they had lodged. Although usually trifling, the malady may sometimes assume a severe form, lasting nearly a fortnight, and has been known to cause the death of an old man seventy-one years of age. It may apparently be prevented by the simple expedient of washing the reeds before their manipulation.—*Lancet*.

New Slate Mines.

An important discovery of slate was made a short time ago at a spot about one mile from L'Anse, Mich., which report now says is proving of immense magnitude. The following is given in a press dispatch: "A depth of 25 feet has been reached, which shows a deposit of excellent billiard and roofing slate. The vein dips toward the southeast to a distance of 300 feet in width as far as the test pits have been made, then runs west, crossing the Marquette, Houghton & Ontonagon Railroad to an indefinite distance. The outcroppings on the sections show the slate to be within three feet from the surface. The facilities for shipping are excellent. With the railroad to the left of it 200 feet, and the Keewenaw Bay one mile in front of it, the markets of Chicago, Buffalo, and other leading ports can be reached with a cost of 50 to 60 cents a square. The discovery is looked upon with great interest, and will be one of the leading industries of the Upper Peninsula. Stripping and test pitting and other work to improve the property is under progress. The slate is equal to that which has been selected for covering the new Board of Trade Building in Chicago."

American Wheat Exports.

According to the statistics of the British Board of Trade, the United States supplied four years ago 75 per cent of all the wheat and flour imports into Great Britain; in 1881 this import decreased to 69, in 1882 to 55, and in 1883 to 46 per cent; in other words, the import of 93,000,000 bushels in 1881 diminished to 74,000,000 bushels in 1883. The decrease is not due to a reduced consumption, for the total import has increased from 136,000,000 bushels in 1881 to 160,000,000 bushels in 1883.

While we thus see a constant diminution in Great Britain's imports from the United States, we find an increase from other countries, especially Russia and India. Russian grain shipments to England have, for instance, increased from 8,000,000 bushels in 1881 to 27,000,000 bushels in 1883, and the import from India, which consisted of 15,000,000 bushels in 1881, has risen to 23,000,000 bushels in 1883.

In addition to this, Australia produced in 1883 not less than 32,000,000 bushels of wheat, of which a large part was taken to England and sold at prices refused by American speculators.

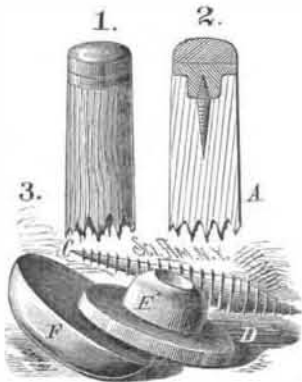
BUTTER PACKAGE.

The accompanying engraving illustrates an invention, recently patented by Mr. J. P. Sinclair, of Mottville, N. Y., which provides an air tight package for holding small quantities of butter. The package is composed of two similar parts made with flanges, so as to form lips which hold the rubberpacking in place when the jars are put together. The flanges are beveled to form enlarged portions on opposite sides—as clearly shown in the perspective view, Fig. 1—thereby permitting the jars to be drawn tightly together upon the packing by the buttons. The flanges are under cut in order to furnish a secure hold for the notches in the buttons. This construction prevents the buttons slipping off or in any way injuring the flanges, and insures an hermetical seal.

After the jars have been filled with butter they are placed together, the packing rings having been put between their edges, and the buttons are moved to the thick portions of the flanges. Air being excluded from the interior, the butter will keep fresh and sweet for a great length of time. One-half the contents of a package can be removed, moulded ready for the table, as shown in Fig. 4, without disturbing the other half. Fig. 2 shows the packing ring and clamping buttons, and Fig. 3 is a front view of one jar.

BILLIARD CUE TIP.

A screw, C, which is tapered toward both ends—one taper being about one-third the length of the other—is screwed into the end of the cue in the middle of a cavity having a concave bottom, the short taper projecting from the base of the cavity. One side of the butt piece, E, is furnished with a neck fitting in the cavity in the cue and into which the short taper is screwed, thereby holding the piece securely on the end of the cue. The tip, F, is then glued on the



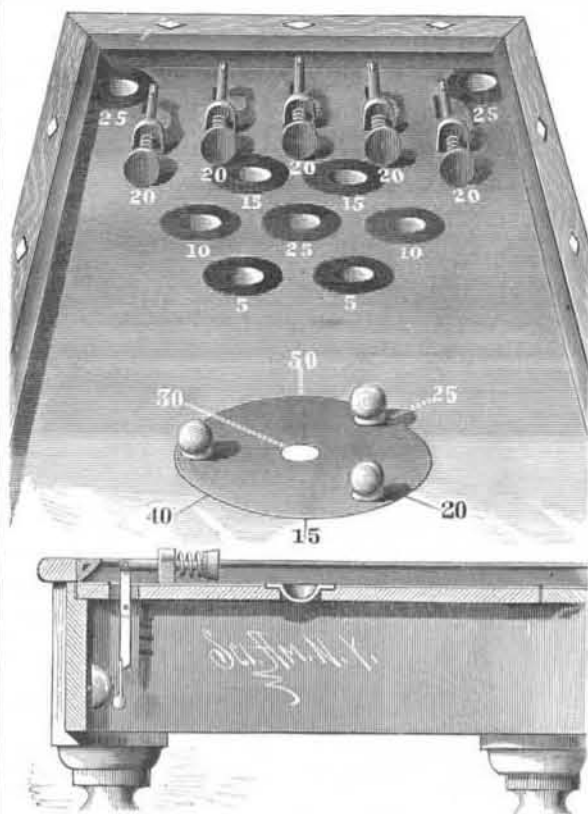
THOMAS & CORES' BILLIARD CUE TIP.

front surface of the butt piece. As the bottom of the cavity is made concave, the leather, in shrinking, forces itself against the screw, binds firmly, and cannot become detached. The tip can be adjusted very readily and accurately, and in such a manner that it cannot be knocked off.

This invention has been patented by Messrs. W. H. Thomas and C. B. Core, whose address is P. O. Box 696, Peoria, Ill.

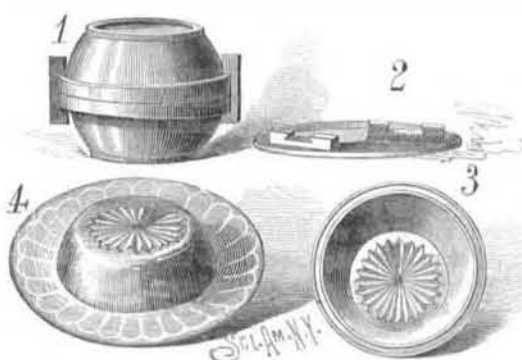
NEW GAME TABLE.

The table is rectangular in form, covered with baize, and cushioned at the edges like a billiard table. Near the upper



DE FOY'S NEW GAME TABLE.

corners are formed pockets, and near the center of the table is a cluster of pockets, each of which is made of hard rubber, flanged and set in a circular countersunk recess. Just beyond this cluster toward the head of the table are secured five uprights arranged in crescent form. These uprights support buffers which, when struck by a ball, ring a bell placed under the table. This mechanism and the way the pockets are formed will be readily understood from the lower engraving, which is a sectional view. In the center of



SINCLAIR'S BUTTER PACKAGE.

the table is pivoted a wheel provided with three pegs placed equal distances apart. In the middle of the wheel is a spot from which leads a radial index line, and around the wheel, upon the baize, are marked six radial lines as shown. The lines, pockets, and buffers are numbered as shown in the cut.

The game, which the inventor, Mr. Frank R. De Foy, of Dannemora, N. Y., calls "Apollo," is played with one red, four white, and four black balls, by two or four persons. The red ball is placed on the spot on the wheel. The first player shoots a ball, with a cue, at one of the pegs, so as to revolve the wheel and start the red ball off. If this ball goes in any of the pockets in the cluster, it counts for double the number marked upon it; and if the index line of the wheel stops in line with one of the marks in the table, it counts the number indicated. Subsequent shots are made at the balls on the table, and if they strike the red and another ball, it counts five. Any of the balls entering the cluster pockets or striking the buffers count what they are marked, but if the player sends his own ball into one of the corner pockets it counts twenty-five for his opponent. Unless the player hits his partner's ball with his own, he cannot count. If the player touches his partner's ball, then touches the red, it counts fifteen. The game is two hundred points.

California Dried Fruits.

Geo. W. Meade & Company, of San Francisco, give the following resume of the above California products for the year 1883:

| | |
|------------------------------|-----------------|
| Raisins, 20 pound boxes..... | 125,000 boxes. |
| Sun dried apples..... | 800,000 pounds. |
| " peaches..... | 500,000 " |
| " pears..... | 75,000 " |
| " apricots..... | 300,000 " |
| " nectarines..... | 30,000 " |
| " figs..... | 60,000 " |
| Evaporated apples..... | 250,000 " |
| " apricots..... | 90,000 " |
| French prunes..... | 250,000 " |
| Dried grapes..... | 150,000 " |
| Pitted plums..... | 100,000 " |
| Comb honey..... | 125,000 " |
| Extracted honey..... | 835,000 " |
| Almonds..... | 700,000 " |
| Walnuts..... | 500,000 " |

Acidity of Beer.

It is frequently asserted that the acidification of beer is due to the development of acetic acid, and therefore writers have frequently called this change acetification; but when beer is submitted to careful chemical analysis, it is surprising to find how small a quantity of acetic acid is to be found in even that which is very sour. The fact is that very little acetic acid is formed in beer, the acid which gives the taste of sourness being mostly lactic acid. Acetic acid is only formed by the oxidation of alcohol, brought about by the intervention of a peculiar ferment called *Mycoderma aceti*, while lactic acid is formed by the simple molecular change of any of the carbohydrates of the sugar type, and does not even require the presence of any oxygen. Lactic acid may be easily distinguished from acetic acid by its property of not being volatile. If the total acidity of a sample be first determined, and then a portion of the same beer be evaporated to dryness, and the acidity of the residue be determined, this will give the amount of lactic acid, and this, deducted from the total acidity, will give the amount of acetic acid.

Resolutions of the Legislature of the State of New York.

On the 11th inst., in the Assembly of New York, the subject of the proposed objectionable changes in the patent laws came up for discussion, in the course of which Gen. Husted, from Westchester County, made a very able speech in defense of the rights of inventors and in support of patent property. The following excellent resolutions were passed almost without a dissenting voice:

RESOLUTIONS OF THE NEW YORK ASSEMBLY.

Whereas, The incentive and rewards given to inventors by the Constitution of the United States and the laws of Congress passed thereunder have done more, perhaps, than any one cause to advance our whole country to the front rank in wealth, resources, and industries among all nations in the world; and *Whereas*, any material change in those laws would, in the opinion of this House, seriously retard our material progress as a people,

Therefore, be it resolved, etc., That our Senators and Representatives in the United States Congress are respectfully requested to oppose the passage of any bill which would have the effect to discourage inventions, by impairing the value of patented property or of imposing any conditions on the owners of such property in prosecuting and maintaining their rights to the full value of their said property which are not equally applicable under the laws of Congress to the rights of all property, and the remedies provided to protect the same, for all citizens of our entire country.

Resolved, That this House heartily approves of such amendments to existing patent laws as shall provide speedy and full punishment for all persons who appropriate the patented property of others without authority of law, and manufacture and sell the same to innocent purchasers and users thereof, to the great annoyance in some cases of the user, and to the great injury of the rightful owner of such property in all cases.

Resolved, That a copy of these resolutions be forwarded, etc., etc.

It is to be hoped that the Legislatures of all the other States in the Union will pass similar resolutions without delay. A little earnest effort on the part of the friends of progress and industry in each State where the Legislature is in session will secure the adoption of suitable resolutions likely to have much influence with Senators in Congress.