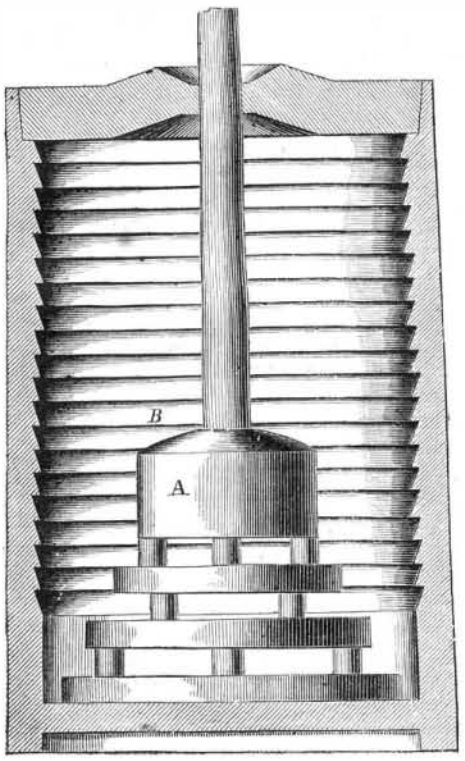
WHITE'S CHURN.

This engraving represents a new churn which would seem to be novel and efficient. In detail it consists of a dasher, A, which is an inverted hollow chamber, inwardly and outwardly of a pyramidical shape, having upon its exterior a series of steps diminishing in area. The walls of this dasher may be either open or pierced with holes for the passage of air and cream



to and fro as it is dashed up and down in the cream. In this way air is carried down with it at each stroke and the cream forcibly ejected through the holes in the dasher against the corrugated interior of the churn.

The interior of the churn is grooved or corrugated, as at B, to increase the friction of the cream thrown against it, and so aids in breaking the sack which contains butter. As the dasher descends, the cream, passing up through the central opening of each ring, is forced against the under surface of the one next above, and forcibly projected, as before, against the walls of the churn. The concussion thus produced has the effect before described.

The cream, in passing from one elevation to another during the ascent of the butter, is also subjected to the same action.

By this apparatus, under favorable circumstances, as regards temperature, etc., the butter may be produced and gathered in from two to five minutes.

An application is pending through the Scientific American Patent Agency by H. W. White, of Olney, Ill. For further information address him at that place.

SPECIAL NOTICES.

William McCord, of Sing Sing, N. Y., has petitioned for the extension of a patent granted to him on the 27th day of July, 1852, for an improvement in soaps.

Parties wishing to oppose the above extension must appear and show cause on the 9th day of July next, at 12 o'clock, M., when the petition will be heard.

Thomas Castor, of Philadelphia, Pa., has petioned for the extension of a patent granted to him on the 3d day of August, 1852, for an improvement in dumping wagons.

Parties wishing to oppose the above extension must appear and show cause on the 16th day of August next, at 12 o'clock, M., when the petition will be heard.

Manufacture of Wafers.

The mode of making the best quality of wafers, as practiced by the English manufacturers, is as follows: Fine wheat flour is taken and mixed with white of eggs and isinglass into a very smooth paste; this is spread over the tin plates evenly, and dried in an oven, several of the plates being placed one over the other to communicate a glossy surface to the wafers. When dry the sheets of paste thus formed are laid up in a pile, about an inch or more in depth, and cut into circular pieces by a hollow punch, which allows the wafers to pass up its tubular cavity and discharge themselves sideways as the cutting proceeds, which is effected with great rapidity. The variety of colors that are ordinarily communicated to wafers, is given to them in the paste, by the usual pigments in the dry powdered state, or previously dissolved in the water employed.

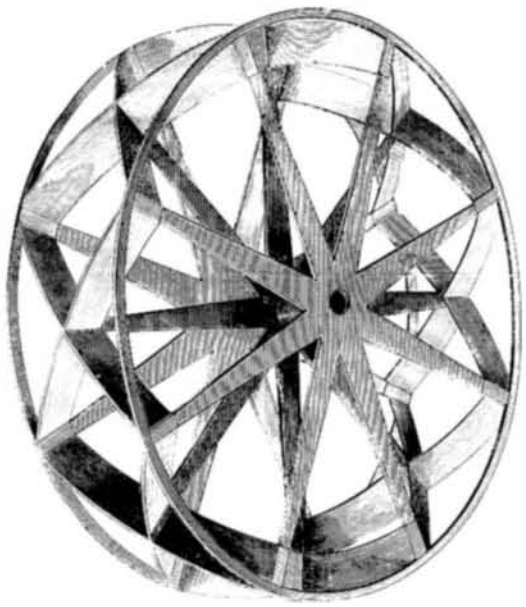
The French isinglass wafers, made in France, are formed of isinglass dissolved in water to the proper consistence, which is poured out upon plates of glass provided with borders, and laid upon a level table; to prevent the blue from sticking to the plates, a little ox gall, or other suitable material, is rubbed over them. Previous to the isinglass becoming quite dry, they are cut through along the borders. The leaves are then removed and cut out with hollow punches, as in the case of other wafers. The various colors are also communicated to them by pigments while in fluid state.

Improved Paddle Wheel.

Paddle wheels of the ordinary kind are objectionable from the quantity of water they raise behind and from the violent shock with which the buckets strike the water. It is argued that by disposing the paddles differently, so that the mechanical action is different, better results will be obtained.

This engraving shows a wheel designed to be more efficient than the ordinary wheel. To this end it has buckets placed diagonally across the face. They thus enter with little or no noise or jar, and leave the water freely, presenting no great areas of surface in a favorable position for raising the water behind.

A wheel constructed like this one is much stronger than the common wheel, requires less bracing, and is therefore lighter and cheaper.



CHOATE'S PADDLE WHEEL.

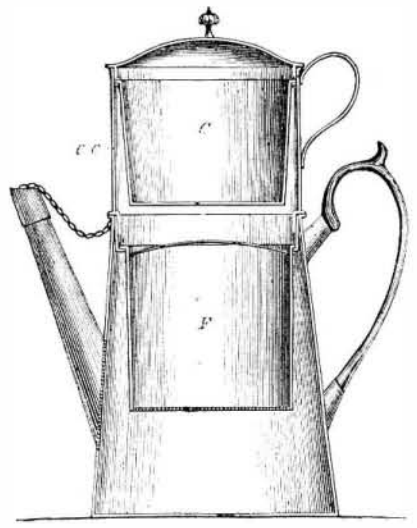
The proprietors and patentees desire to sell State rights or single rights for use on boats. It was patented through the Scientific American Patent Agency on October 10, 1865. Address Wm. Choate & Co., Newburyport, Mass., for further information.

THE BEAUMONT CONDENSING TEA AND COFFEE POT.

The almost universal use of tea and coffee affords a sufficient reason why any device to improve these beverages, or to reduce their cost, should and does command the attention and excite the interest of the public.

The art of making good tea and coffee, and the reason why so few excel in it, are not generally understood. The distinguished chemist, Baron Liebig, in a recent article upon coffee and its preparation, incidentally shows why the object sought is so seldom attained. After speaking of two methods of making coffee, viz, by filtration and infusion, he says of the third: "Boiling, as is the custom in the East, yields excellent coffee," but, "if boiled long, the aromatic parts are volatilized, and the coffee is then rich in extract, but poor in aroma." Here, then, is the root of the whole difficulty—in making either tea or coffee, if the material be steeped or boiled long enough to obtain a large proportion of its extract, its aroma is disengaged or volatilized, and passes away with the vapor arising from the heated liquid.

That method or device, therefore, which shall in the most perfect manner condense and retain the



steam arising from the boiling tea or coffee in preparation for the table, must of necessity be the best method or device.

It is claimed for the article whose name heads this notice, that, in a greater degree than ever before attained, it *does* accomplish this object. With what degree of justice this claim is presented, our readers will be enabled to judge upon examination of the engraving and its accompanying description.

The body is that of an ordinary tea or coffee pot, with a cover or cap upon the spout. The filter, F, is a cup (with bottom of perforated tin) which can be taken out at pleasure, and in which the material is placed for steeping or boiling; this retains the grounds, and, in connection with the condensing principle, makes a clear beverage, without the use of eggs or other clarifying substance.

The condenser, C, is a movable cup, fitted to the top of the pot, to be filled with cold water when in use, formed of two cylinders; the inner one (closed at bottom and forming the cup) being connected with the outer one near the top, the space between the two cylinders forming the condensing chamber, *c c*, opening into the pot below, and having no other outlet; into this chamber the steam from the boiling liquid rises and is condensed upon the surface of both the inner and outer cylinders, and is thus prevented from escaping, thereby retaining the aroma, which indicates and in part forms the flavor of tea and coffee.

The proprietors claim for this invention great superiority in effectiveness—therefore in economy—on the ground that the condensing surface is much larger than in any other article for a similar purpose, this peculiarity making it highly valuable in the preparation of tea, the aroma of which is so much more delicate and difficult to retain than that of coffee.

It is also, as will be perceived, so simple in construction that it can be as conveniently used, as readily repaired, and as easily cleaned as any ordinary coffee pot.

For further information address the patentee, John Beaumont, Hartford, Conn., or the proprietors, Beaumont & Guernsey, New Britain, Conn.

We would call the attention of manufacturers and mill owners to the advertisement of the Gillespie Governor Co., of Boston, in another column. From the number of excellent testimonials we have seen from parties who have had this Governor in use, we are led to believe it possesses the qualifications the advertisements claim for it.