FOREIGN NEWS AND MARKETS.

The *Siecle* publishes an analysis of the woolen trade of France, which it considers a national industry *par excellence*. Prior to the revolution of 1789 the production of woolen cloths in France was estimated at 225,000,000 francs annually; at present it exceeds, in annual value, 500,000,000 francs. The value of the woolen exports from France amounts to 160,000,000 francs, the greatest amount of which comes to the United States. Considering the great amount of exports, the quantity of woolen goods consumed in France is exceedingly small for the number of inhabitants—36,000,000. The native wool of France is obtained from 35,000,000 sheep, five-sevenths of which are inferior breeds and do not yield over 3 lbs. to the fleece; the remaining 10,000,000 yield about 6 lbs. each annually. This supply is inadequate to the wants of the manufacturers, therefore about 78,000,000 lbs. are imported yearly—mostly from British possessions. There are 3,000 woolen manufactories in France, in which 280,000 operatives are employed. The wool imported into it is subject to variable duties, according to its value; it is very high on the finest qualities, and woolen goods of all descriptions are subjected to a really prohibitory tariff. There is about to be a very great reduction in the tariff of the wool and goods imported into France from England, by the recent treaty formed between the two governments.

The astonishing number of 523,000,000 letters were carried through the British Post-office last year, which was an increase of 19,000,000 over the previous year. In the year 1839, when the penny postage system was introduced, there was only 75,000,000. The increase, therefore, is sevenfold in twenty years. The English postage system is a model for all nations. It is the cheapest, the most comprehensive and best managed in the world. It is not possible for letters to be carried so cheaply in America as in England, because the routes are more extensive and the population so sparse in most of the States; but the British money order system might be re-adopted with great benefit to the people. We use the term *re-adopted*; for this system was once connected with our post-office and then disconnected from it about 13 years ago, on account of the peculations which sprung up in the minor post-offices, and which entailed great loss to the government. In England, during 1858, their were no less than $61,000,000 sent through the Post-office by money orders, most of which were in small sums.

In Birmingham the brass and tin workers are very busy and trade is good.

Welsh rails—the kind mostly sent to the United States—are £5 12s. 6d. at Cardiff. Scotch pig iron has greatly advanced, owing to the strike among the makers and the closing of 100 furnaces. It is selling for £3 1s. 6d. per tun. Refined English tin, £138 per tun. Spelter, £21; a rise of 10s. Tin plates are inactive. Banca tin is at £136. English fine tin is not so highly esteemed as Banca in the United States, and yet it sells for £2 per tun higher in England.

WEEKLY SUMMARY OF INVENTIONS.

The following inventions are among the most useful improvements patented this week. For the claims to these inventions the reader is referred to the official list on another page:—

ALARM GAGE.

This invention consists in a novel and ingenious system of valves and passages by which steam is admitted to act upon a whistle or other equivalent device to sound an alarm in case of the water getting low or the pressure of steam too high in a boiler; the same whistle serving for both alarms. The patentees of this novel device are George W. Grader, Benj. F. Cowan and A. C. Wurzback, of Memphis, Tenn.

STEAM VALVE.

This invention (by Addison Crosby, of Fredonia, N. Y.) consists in a valve of the oscillating kind, constructed with an opening through it, and with two opposite faces eccentric to its axis of oscillation and fitted to a seat of correspondingly eccentric form, which contains opposite ports or openings which are covered and closed by the faces of the valve whenever the valve bears upon its seat, such valve when used in a steam engine or other apparatus in which there is pressure of steam or other fluid, being subject, when closed, to just sufficient pressure of steam to keep it tight, but being perfectly balanced as soon as it commences opening, and in all its applications, working entirely without friction between its faces and seat.

KNIFE HANDLE.

Lucius Carrier, of Worcester, Mass., has patented an improvement in the construction of knife handles, which, although applicable to handles for all cutlery, is more especially designed for large knives, such as the Spanish knife or machete, and the like. The invention consists in having the body of the handle formed of pieces or horn, leather or wood, and covering the same with a single piece of horn, secured in proper position by rivets or bolts.

TANNING HIDES.

As a green hide becomes dry by the evaporation of its liquids, its flesh surface forms a hard, flinty scale, to relieve the hide of which it has been customary to submit it, during the softening process, to the mechanical action of fulling stocks or frequent and hard hand manipulations, which have, to some extent, the detrimental effect of loosening the small bundles of fibers composing the structure of the hide. Dennis Aldrich, of St. Louis, Mo., has invented a process of softening hides which have arrived at the above condition, known as "flint hides," which dissolves the flinty scale without injuring the texture of the hides; such process consisting in treating such hides successively with diluted acetic acid and a solution of carbonate of ammonia or chloride of ammonium.

OSCILLATING PISTON ENGINE.

On page 1 of the present volume of the SCIENTIFIC AMERICAN, we published an engraving of a novel oscillating piston engine, which was invented by Mr. Mark Runkel, of this city. The object of our present notice is an improvement made by the same gentleman on his former patent. His engine is now so arranged that the pressure on both sides of the piston is equally balanced, and that no extra friction or wear will take place in the journal-boxes of the piston rod. This engine is particularly adapted for driving propellers on steamboats, as it takes up but little room, and it can be run with great speed. The inventor has secured patents on the same in this country as well as in Europe, through the Scientific American Patent Agency.

APPLICATIONS FOR THE EXTENSION OF PATENTS.

Shell-cutter.—Joel R. Morse, of Lowell, Mass., has applied for the extension of a patent granted to him on the 2d of May, 1846, for an improvement in machines for cutting shell and horn. The petition is to be heard at the Patent Office on the 30th of April next; and the testimony closes on the 16th of that month.

Plow.—John M. May, of Janesville, Wis., has applied for the extension of a patent granted to him on the 3d of May, 1846, for an improvement in plows. The petition is to be heard at the Patent Office on the 1st of May next; and the testimony closes April 18th.

Screw-cutter.—H.A. Harvey, administrator of T. W. Harvey, late of New York, deceased, has applied for the extension of a patent granted to said T. W. Harvey on the 30th of May, 1846, for an improvement in machinery for cutting screws. The petition is to be heard at the Patent Office on the 14th of May next; and the testimony closes on the 30th of April.

SHIPMENTS OF COPPER FROM LAKE SUPERIOR FOR 1859.—We extract the following statement in regard to the shipment of copper from the *Mining Gazette*, published at Houghton (Portage Lake), Mich.:—"Through the kindness of John S. Blain, Esq., of Eagle River, we are enabled to furnish our readers with full and reliable statistics of the copper shipments from the various districts during the season of 1859:—Eagle River, 1,301 tuns 1,606 lbs.; Ontonagon, 2,610 tuns 21 lbs.; Portage Lake, 1,573 tuns 332 lbs.; Eagle Harbor, 607 tuns 1,482 lbs.; Copper Harbor, 3 tuns 180 lbs.; total, 6,095 tuns 1,621 lbs. This total shows an increase of 149 tuns 320 lbs. over that of 1858; the amount for that year being 5,946 tuns 1,301 lbs."

GREAT MORTALITY AMONG CATTLE.—There is much excitement at the present time, in certain districts in Massachusetts, in consequence of the appearance of a new and fatal disease which has broken out among cattle and is spreading to an alarming extent. It is said to have been introduced by some cows which were imported from Germany, and which arrived at Boston in a very sickly condition. One of them soon died and the disease was communicated to others, causing numerous deaths, and producing great anxiety among the farmers.

ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WEEK ENDING MARCH 6, 1860.

[Reported Officially for the SCIENTIFIC AMERICAN.]

. Pamphlets giving full particulars of the mode of applying for patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

27,338.—Dennis Aldrich, of St. Louis, Mo., for an Improvement in Preparing Hides:

I claim the treatment of hides successively with diluted acetic acid, and a solution of carbonate of ammonia, substantially as and for the purpose specified.

37,339.—John Allison, of St. Martinsville, La., for an Improvement in Cane Coverers:

I claim the boards or planks, A A, with blades, D D, rotary harrow, J, and adjustable harrow, K, attached, the frame, E, provided with the roller, F, scraper, G, and one or more rotary harrows, H I, the whole being combined and arranged for joint operation as and for the purpose set forth.

[The object of this invention is to obtain a machine for covering cane that will, during the operation, pulverize the earth, and cause the seed to be covered with a loose, light and friable mold permeable to air and moisture, and thereby greatly favoring its germination.]

27,340.—John Armstrong, of New Orleans, La., for an Improvement in Steam Boilers:

I claim the combination of the upright water vessels, A A A', horizontal connecting cylinders, B B, and flues, b b, the said vessels, A A A', being arranged substantially as described, that their upper portions may constitute steam spaces, and their lower parts sediment collectors, as set forth.

And in combination with the said upright water vessels, A A A', horizontal connecting cylinders, B B, and flues, b b, I claim the return flues, C C, passing through the said water vessels and connecting cylinders, as specified.

[This invention consists in a novel combination and arrangement of a series of upright water vessels, horizontal connecting cylinders and flues, constituting a very effective and durable boiler.]

27,341.—E. H. Ashcroft, of Boston, Mass., for an Improved Pressure Gage for Steam Boilers:

I claim my improved locomotive engine boiler steam gage, as made with the coiled spring, the chain and lever arranged and applied directly to the diaphragm rod, and the index pointer shaft, in manner and so as to operate substantially as described.

17,342.—J. B. Atwater, of Ripon, Wis., for an Improvement in Rifled Fire-arms:

I claim constructing the barrel, substantially in the manner set forth, to wit, with a diminished number of rifles or grooves, from or from near the center or middle of the barrel to its muzzle, for the purpose of diminishing the friction of the ball, after the powder has exerted its expansive force upon it, as is specified.

27,343.—Francis Baschnagel, of Beverly, Mass., for an Improved Plastic Compound:

I claim combining the powder of leather previously boiled and dried, with a mixture of solutions of glue and tannin to form a plastic compound, which may be modified and treated in the manner substantially as specified.

27,344.—Albion Bean, of Dedham, Mass., for an Improvement in Railroad Car Brakes:

I claim the arrangement and application of the lever weight with respect to the trunk frame, the brakes and the hand windlass, substantially in manner and to operate as described.

I also claim so connecting the two lever weights of the two adjacent truck frames that both be raised by one chain, or its equivalent, applied to either, as set forth.

27,345.—J. H. Bloodgood, of New York City, and M. A. Johnson, of Lowell, for an Improvement in Felting Machinery:

We claim an elastic traversing apron moistened and warmed by steam, and as the sole bed for the material that is being felted, in combination with a revolving vibrating felter, operating in the manner substantially as described for the purpose set forth.

Second, We claim a felting or rubbing surface for felting machines, composed of the end grain of wood and operating as described.

Third, The device for keeping the apron straight upon its roll, consisting essentially of the independent end pieces, S, cord, t, and spring, P, or their equivalents, operating substantially as set forth.

27,346.—J. L. Butler, Wm. L. Hosford, and D. W. Smith, of Brooklyn, N. Y., for an Improvement in Burners for Vapor Lamps:

We claim the construction of the adjustable thimble or jacket, A A, with expansions or ears, a a, and the adaptation thereto of removable heaters, B B, for the purpose set forth.

27,347.—Joshua F. Cameron, of Livingston county, Mo., for an Improvement in Shovel Plows:

I claim the arrangement of the beam, A, standard, B, shovel, C, hinge screw, D, rods, E E, and set screws or pivots, F F, as described, for the purposes set forth.

27,348.—Wm. B. Cargill, of Waterbury, Conn., for an Improvement in Hand Cotton Pickers:

I claim the reciprocating gatherer, arranged and operating substantially as described, whereby I am enabled to keep steadily in contact with the balls, the said gatherer for extracting the cotton, as set forth and specified.

I also claim the combination with the reciprocating gatherer, the stationary stripper for discharging the cotton from the said gatherer, as set forth and specified.

I also claim widening that portion of the gatherer which is always in the case for the more perfect delivery of the cotton to the receptacle, and to prevent clogging within the case, as set forth and specified.

27,349.—Lucius Carrier, of East Douglas, Mass., for an Improvement in Knife Handles:

I claim, as an improved article of manufacture, a knife handle formed of a body or filling of horn, wood, or other suitable material, secured by a single piece of horn, substantially as described.

27,350.—N. R. Carrington, of Cold Water, Miss., for an Improvement in Seed-planters:

I claim the combination and arrangement of the seeding wheel, H, constructed as described, the projecting arms, d d, alternating in action on the opposite sides of said seeding wheel, and the tangential sliding gate, I, substantially as specified, and in combination therewith, the "false floor," L, for adapting the variations of the seeding wheel to different kinds of seed, as set forth.