

resins, nearly all of which are still in use by the manufacturers of odors. Among the curiosities shown at Alnwick Castle is a vase that was taken from an Egyptian catacomb. It is full of a mixture of gum resins, &c., which evolve a pleasant odor to the present day, although probably 3,000 years old. We have no doubt that the original use of this vase and its contents were for perfuming apartments in the same way that pot pourri is now used.

#### RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week; the claims may be found in the official list:—

**Thatching.**—The object of this invention is to obtain a means whereby the straw of machine-thrashed grain may be used for thatching purposes. Straw thatch was formerly used to a great extent for roofing purposes when grain was thrashed by hand with a flail and the straw left in an unbroken state, but of late years it has been mostly abandoned on account of the very general introduction of the labor-saving thrashing machine, which leaves the straw in a broken and tangled state, utterly unfit for the purpose of thatching as hitherto practiced. This invention consists in attaching strips to both sides of the rafters of a roof as well as to both sides of the studs of a building in such a manner that the exterior straw will be held between the strips by its own elasticity, the space between the strips, if desired, being filled with straw or other similar or suitable material, by which the straw of machine-thrashed grain may be used for the purpose specified. This invention is due to James Weed, of Muscatine, Iowa.

**Securing Engravers' Blocks together.**—The wood blocks used, when of any material size, composed of several pieces, some of which are secured together by glue to form larger pieces which are secured together by bolts so arranged and applied that the parts thus connected may be disconnected and put together again when required. The object of this is to admit of several engravers working simultaneously on the same design, and thereby expedite the engraving of large blocks. The design is drawn upon the block by the artist when the several parts of the former are all connected together, and after the design is drawn the parts of the block are disconnected, and each part given to an engraver, and when the engraving of each part is finished they are again secured together. These blocks are at present secured together by metal rods or bolts turned in biconical form, a screw being cut on each end of the rod and a nut fitted on it, the end passing through a hole in the blocks and the nuts fitted in recesses made in the blocks. This arrangement is attended with considerable trouble and inconvenience in connecting and disconnecting the parts of the block, and the bolts are expensive to manufacture, objections which are fully obviated by this invention. The above invention is by Heber Wells, of No. 42 Ann street, New York.

**Machine for trimming the Heels of Boots and Shoes.**—This invention consists in the use of a rotary cutter wheel provided with a gage at each end, and having cutters applied to it and fitted in thwarts in such a manner that the heels of boots and shoes may be trimmed with the greatest facility and very expeditiously, and a free escape allowed for the shavings so as to effectually prevent the choking or clogging of the cutter wheel. C. H. Helms, of Poughkeepsie, N. Y., is the inventor of the above.

**Smelting Furnace.**—This invention consists in the employment for the smelting or reduction of iron, copper, lead, silver, gold, and other metals from their ores, of a crucible or other vessel, chamber, or receptacle for containing the ore, so placed in a furnace as to be wholly or for the most part surrounded by the fuel, and so provided with openings or perforations that the flame and heated gaseous products of combustion from the fuel are forced into it, upon it, and through the ore. It also consists in the introduction of the blast to the furnace containing such crucible, vessel, chamber, or receptacle, through a grate, or slotted or perforated bed, whereby it is carried upward with an equally distributed pressure upon and among the fuel, and the flame is so forced in jets through the openings of the said crucible, vessel,

chamber, or receptacle, that the said openings have the effect of so many tuyeres or blow-pipes. The above is the invention of Jonas Winchester, of 36 John street, New York City, and the patent issues to himself and Geo. H. Davies, of Cambridge, Mass., as full assignees. Mr. Davies may also be addressed in relation thereto at 20 Dey street, New York City.

**Clothes-rack and Frame.**—This invention relates to a new and improved portable clothes rack and frame designed for holding clothes after being ironed, and also at other times, or whenever convenience requires; designed more especially for laundry and bed room use. The invention consists in providing a frame with a series of folding bars placed at each end of the frame, so that they may be folded or adjusted in and out, and having the lower band of the frame provided with pegs, and the frame provided with brackets to admit of it being hung upon the wall. The above invention is by Henry Buell, of Mount Morris, N. Y., and the patent issues to himself and Henry A. Green, of said place, as full assignees.

**Artificial Limb.**—The principal object of this invention is to combine with the various joints, or with the springs which control the motion of said joints, certain cords or straps in such a manner that by pulling such cords or straps the position of the joints can be adjusted or the tension of the springs regulated to suit different circumstances. The invention consists also in the employment or use of an oval or eccentric pin in the knee-joint in such a manner, that by turning said pin the length of the leg may be slightly altered, either lengthened or shortened, as may be desirable; further in the application of a screw rod rising from the angle-joint to the knee-joint in such a manner that the length of the leg can be adjusted to suit different persons; also in the employment or use of a screw rod connecting the knee-joint with the cup intended to receive the stump in such a manner that the cap can be raised or lowered at pleasure in order to regulate its distance from the knee-joint; further in the application of an adjustable screw in combination with the spring in the ankle-joint, in such a manner that the extent of the motion of the ankle-joint can be regulated, and that in bending the leg forward the screw, by coming in contact with said spring, relieves the leg from the sudden strain to which it would be exposed if its motion should be stopped suddenly; finally, in the employment of an elastic sole and packing in combination with the toe-joint in such a manner that in walking the natural motion of said toe-joint is imitated. G. C. Kirschmann, of 164 Church street, New York City, is the inventor of this improvement.

**Wind Wheel.**—This invention relates to a new and improved wind wheel, such as are placed on a vertical shaft. The object of the invention is to obtain a wind wheel of the class specified which will operate perfectly in whatever direction the wind may be, and one which will admit of being very readily rendered inoperative when desired, and when in operation rotate with an equal or uniform speed. Alfred Trim, of Ionia, Iowa, is the inventor of this improvement.

**Machine for cutting and embossing Leather.**—This invention relates to a machine intended to cut rectilinear or curved strips of leather, paper, cardboard, muslin, or other similar material, of a uniform size, or to emboss such material at regular intervals, or to cut and emboss it simultaneously by the automatic action of a rising and falling head carrying the cutter or die, or both, in combination with a vertically adjustable bed and reciprocating self-acting feed apparatus. Seth D. Tripp, of Stoneham, Mass., is the inventor of this improvement.

**Melting Furnace.**—This invention consists in the employment or use for the purpose of melting metals or other materials, of a crucible with double-arched or double-concave bottom and sides, in such a manner that said bottom and sides are braced every way by the double arch and the crucible is prevented from cracking or splitting; also in a crucible provided with rounded corners and fitting in a casing with correspondingly concave seats in such a manner that by said seats the crucible is strengthened and the application of a tap hole to the crucible is rendered practicable; finally in the use of a double-arched cover fitting on the casing in such a manner that by the two arches the works are strengthened and it is pre-

vented from cracking or splitting. John Thomson, of New York City, and Thomas Widdowfield, of Brooklyn, N. Y., are the inventors of this improvement.

#### FARMERS' CLUB.

From the large number of subjects discussed at the meeting of the Farmers' Club on the 7th of June, we take the following:—

##### THE ASPARAGUS BEETLE.

Dr. Trimble presented specimens of the egg, the larva, and the perfect beetle of the insect which is proving so destructive to asparagus beds. He remarked that insects eat very little when in the perfect state—that of the fly, moth, or beetle—most of the eating being done when the animal is in the grub or larva state. The curculio beetle does eat a very little, the speaker had fed them on apples. Dr. Trimble further stated that he had examined the crops of a very large number of insectivorous birds this year, and had been surprised to find so few flies in them, the food consisting almost wholly of beetles. This is the case even with the fly-catchers, the broad-billed birds, such as the night-hawk and swallow, which have mouths adapted to catch insects in the air. These observations first led him to a knowledge of the fact that the air is frequently filled with swarms of beetles. Asparagus beds may be freed from these bugs by turning chickens upon them. The speaker found that when his fowls had devoured the beetles and the larva, the small chickens began to feed upon the eggs.

##### APPLE BORERS.

A letter was read from Benjamin D. Walsh, of Rock Island, Ills., a man who was pronounced by Dr. Trimble to be good authority in entomology. The letter described two specimens of apple-tree borers, and stated that a thorough washing of the trunks of trees with soap about the last of May was a perfect protection against the borer.

##### THE GAPES IN CHICKENS.

Mr. Bergen stated that the common cause of this very fatal disease is the feeding of chickens with freshly wetted Indian meal; the meal swelling in the stomach. When this food is given to chickens, the meal should be mixed with the water several hours before it is eaten. Some one has suggested that a dough made by mixing Indian meal with urine will cure this disease in chickens.

#### SPECIAL NOTICES.

ASA BLOOD, of Janesville, Wis., has petitioned for the extension of a patent granted to him on Aug. 27, 1850, for an improvement in obstetric chairs and supporters.

It is ordered that the said petition be heard at the Patent Office, Washington, on Monday, Aug. 15, 1864.

JOHN H. TOWNE, of Philadelphia, Pa., has petitioned for the extension of a patent granted to him on Sept. 3, 1850, for improvements in the direct action steam hammer.

It is ordered that the said petition be heard at the Patent Office, Washington, on Monday, Aug. 22, 1864.

All persons interested are required to appear and show cause why said petitions should not be granted. Persons opposing the extensions are required to file their testimony in writing, at least twenty days before the final hearing.

#### A Swordfish.

The splendid ship *Donald McKay* was recently docked in London to undergo repairs. On examining her bottom, the horn of a swordfish was found sticking outside of her copper. It had pierced four and a half inches through a plank and had brought up against a timber inside, when it was no doubt broken off from its socket in the head of the fish. Some idea may be formed of the power of the fish and the sharpness of its sword or horn, from this fact. Many similar instances have been recorded from time to time during the past fifty years. No doubt several vessels have been lost, where the sword has pierced through the planking and been withdrawn again, for it does not follow that it has broken off in every case, and thus blocked the opening like a tree-nail. In old or thin planking the sword would make a hole large and open enough to admit of its being withdrawn by a sudden jerk of this powerful fish.