

Why so Depressing?

During the early spring months it is common to hear persons speak of their feelings in the manner the *London Lancet* describes, as follows:

"Unwonted depression and uneasiness, accompanied with loss of appetite and inability to sleep, are the prevalent causes of complaint just now among the 'tolerably well' section of the community; and, with a large measure of accuracy, the condition, modified as it is by individual peculiarities of state and idiosyncrasies, is attributed to the weather. The relations which subsist between such mental depression as constitutes melancholia and the defective discharge of its functions by the skin may help to explain the phenomenon. The connection of cause and effect may not be clearly made out, and the part which the nerve-centers play in the production of the result may be as obscure as that which they exercise in the control of occasional pigmentary deposits; but the broad fact remains. When the skin does not act freely, when its functions are seriously impeded or arrested, melancholy broods over the mind, just as in the case of a subject of melancholia, as a formulated disease, the skin becomes dense and inactive. It is not a random conjecture, therefore, that the intense and prolonged, albeit unaccustomed and unexpected, cold and damp work their depressing influences mainly through the skin. This is a trite remark, but it is one that may with advantage be made just now, because, in the interests of health-preservation, especial pains need to be taken to secure the freest possible action of the great surface system of excretory glands and the transuding apparatus generally. Warmer clothing, especially at night, frequent ablutions, with sufficient friction, and the promotion of skin activity by every legitimate form of exercise, are obvious measures of health which everybody ought to understand and all should practice."

AN IMPROVED PRESS.

The press shown in the accompanying engraving is designed more particularly for pressing tobacco in hogsheds, but it is equally applicable to pressing other bulky substances. The chief novelty of the invention consists in a suspended hydraulic jack, which may be readily moved from one hogshed to another, avoiding the necessity of a duplication of jacks and greatly facilitating the operation of pressing.

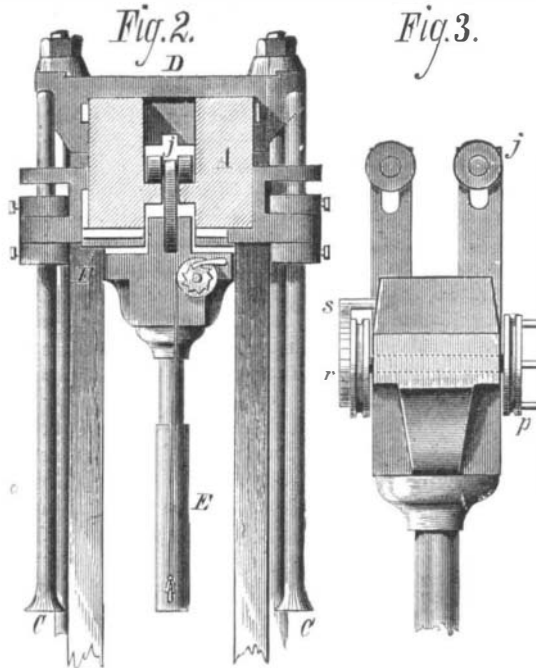
A general idea of the construction and the manner of working the press may be gained from the larger engraving. Details are shown in Figs. 2 and 3 which do not appear in the larger engraving. Two heavy beams, A, which are separated at their upper edges by a series of blocks, are clamped together by bolts and supported by standards that rest on two corresponding beams below, and are connected by iron rods, that are provided with a novel device which admits of easily removing the rods should occasion require. The lower timbers of the press are placed below the floor of the packing room to afford a smooth floor surface.

The timbers, A, are provided with iron or steel plates, F, on the underside, and rails, f, extend along their adjacent faces. From these rails the horizontal jack, E, is suspended by the slotted straps, h, and the rollers, j, the slots admitting of the free movement of the jack along the track when it is not in operation, and allowing the shoulders of the jack to come into contact with the plates, F, when pressure is exerted, without injury to the rollers.

The jack, E, after having compressed the contents of one package is moved to the next; but before this can be done the retaining bars, C, must be brought down upon the boards above the tobacco, and clamped by the collars and set screws at the top of the press. This prevents the tobacco from expanding as the jack is removed. When the cylinder of the jack is raised it is sometimes desirable to retain it in that po-

sition. For this purpose two chains are attached to its lower end and connected with a sort of diminutive windlass at the head of the jack, which is provided with the ratchet, r, and pawl, s.

The inventor says that with this press one man can do the pressing for nine packers, and that its capacity is about four times that of an ordinary screw press. The power of the

**DEANE'S HYDRAULIC TOBACCO PACKING PRESS.**

press is limited only by the strength of the timbers and the power of the jack; it may vary from one ton to one hundred tons. It is very compact, and is so simple that any ordinary wood worker may construct it.

Further particulars may be obtained from the inventor, Mr. Francis B. Deane, Lynchburg, Va.

The Netherlands Open to American Tools.

The Department of State is in receipt of a dispatch from the American Consul at Amsterdam, drawing attention to a

comprised all finished tools which serve mechanics as an aid in their work. Further, parts of tools, such as hammers, spades, chisels, etc., without handles, and augers without piercers, etc., provided they are in the condition in which they are bought by mechanics in the stores and afterward fitted for use by putting on the handles, piercers, etc. Tools of spelter or zinc remain dutiable, likewise mathematical, surgical, chirurgical, optical, and musical instruments."

RECENT AMERICAN PATENTS.

An improved mill for grinding bones, phosphates, and similar articles, has been patented by Mr. T. O. Cutler, of Jersey City, N. J. It consists of a stationary top section, having notched concentric ridges, and a revolving runner, provided with a series of beaters and a notched circular ridge, running between the ridges of the stationary portion.

Mr. Henry Groth, of New York city, has devised a motor for moving dancing figures and other mechanical toys. It consists of a heavy flywheel, which is impelled by unwinding a cord from a sleeve connected by a clutch with its shaft. A spring drum rewinds the cord, so that it may be unwound several times in succession to secure the required speed.

An improved matt for cotton-seed oil presses has been patented by Messrs. J. L. Perkins and G. O. Baker, of Selma, Ala. It consists of two plates of wood fitted to the press box, connected together by a canvas hinge, and provided with sheet metal linings and with an intermediate hinged sheet metal leaf.

A tool for rolling or expanding boiler flues or tubes has been patented by Mr. John H. McGraw, of Oswego, N. Y. It consists in a segmental head having grooves, in which are placed rollers. A central wedge pin is provided for expanding the head.

Mr. John Birks, of Ogdensburg, N. Y., has patented a measuring scoop, which will indicate both the weight and bulk of its contents. It has the usual marks of a liquid measure to indicate the quantity of an article, and it has attached to its handle a spring balance for weighing its contents.

An improved bird-seed reservoir has been patented by Mr. Owen W. Taft, of New York city. It consists in a reservoir pivoted in a frame which supports the cage. It may be arranged as a standard, or it may be provided with means for suspending the bird cage while it is itself suspended by a chain or cord.

An improvement in bed bottoms, patented by Mr. W. H.

Leininger, of Salem, Oregon, consists in forming the bottom of wires, which pass around pins set at the ends of the bed frame and over rubber strips. This arrangement gives elasticity to the bed bottom, and prevents the formation of sharp bends in the wire.

An improvement in the construction of buildings, which consists in sheathing the inside of the studding instead of the outside, and applying vertical strips to the sheathing to which the lathing is nailed, has been patented by Mr. H. R. Crane, of Crawfordsville, Ind.

Mr. William P. Silvernail, of Pittsfield, Mass., has patented an improved hose pipe supporter, by means of which the pipe may be easily directed and controlled under any practicable head of water.

An improved bridle bit, which may be used either with a hard-mouthed or a tender-mouthed horse by simply reversing it, has been patented by Messrs.

A. W. Holland and Edgar N. McKimm, of Lathrop, Miss.

Mr. J. R. Spencer, of Avilla, Mo., has devised an animal trap, in which there are two pivoted platforms whose free ends meet and are held by the same device, so that the platform on which the animal first steps will remain firm and unyielding until the weight comes upon the other.

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ministerial resolution effecting an important change in the tariff of the Netherlands, and one which the Consul thinks is not generally known among American exporters. The following is a translation of the decree referred to:

"Tools of wood, iron, copper, steel, and other metals, as agricultural implements and sewing machines, are free of import duties; and it is stipulated that in this exemption are