

## WHAT HUNGRY MEN EAT.

The reader who is comfortably housed and has an abundance wherewith to satisfy his hunger—who has only to go to the next corner, or to his cellar to procure the necessaries and even the luxuries of life—has but little conception of the straits to which men are sometimes put for want of food, or the substances hungry men take into their stomachs. The keen gnawing sensation occasioned by want of food is utterly unknown to those who live in cities; for although the "appetite" may be good, and excited as the hour of meal time approaches by the sight and smell of food, these emotions are soon dispelled and at least can be borne without great inconvenience for hours. But with that hunger which is akin to starvation the case is different. The most loathsome substances are eagerly seized, and these, which were revolting, become not only tolerably good but absolutely delicious.

That sentinel—the palate—and those pickets—the nostrils—challenge rigidly, in the quiet seclusion of home, every edible that approaches; but when the limbs tremble, when the great arteries no longer overflow with crimson blood, when the brain refuses to think and the eyes to see for want of something to eat, then that garrison—the stomach—receives whatever the highways and byways afford, or what the ungenerous soil may yield. In certain countries, as in Southern Africa and America, there are tribes called "dirt-eaters," who gorge themselves with a peculiar kind of clay, solely to distend their stomachs, so that they may appease nature. Once addicted to this habit it is ineradicable and they fall victims to intestine diseases caused by the abuse. Over the far Western prairies there roam skulking tribes or rather scattered parties of Indians called "Diggers." They are of all wandering savages the most despicable and degraded. They eat the roots of certain plants when unable to procure better food, and are glad to obtain grasshoppers and other insects which the white man looks upon as vermin. In parts of France, chiefly in the wine-making districts, there are found quantities of snails or slugs which frequent the vines; these reptiles are eaten by some and highly prized as delicacies, even by cultivated persons. We all know that the Chinese devour cats and dogs and even mice and rats, and that the edible birds-nests which form a portion of the diet of the higher classes in the country mentioned consist of a species of gelatine or semi-transparent mass which, after being cleansed, forms no despicable dish.

The human stomach must be satisfied at all hazards, and Dr. Kane and his followers found frozen walrus meat and polar bears' heads eaten raw, great delicacies; raw frozen livers he speaks of as delicious titbits. He also mentions that to the Esquimaux "belles" and native Greenlanders a pint of train oil or a bunch of candles was an appreciable gift, and the first was quaffed and the latter munched without loss of time. These are not freaks of appetite; but the promptings of nature, for fat contains more carbon—or, in plain English, more heat or fuel for the support of the vital flame—than lean meat; and it is therefore in those polar regions an imperative and indispensable article of food.

In Norway and Finland a coarse mixture, passing under the name of bread, is made from the inner bark of the pine or fir tree; and it is a well settled fact that the natives in certain parts of Africa eat a peculiar kind of ant with great avidity. Egyptians devour locusts and wild honey (when they can get it), and in the wilds of Southern Africa, round about the region of the Cape of Good Hope, the swarthy Hot-tentots gorge themselves to repletion when opportunity offers upon all parts of the beast killed. Abyssinians and the subjects of the king of Dahomey refresh themselves with steaks, warm and raw, cut from the living animal; and the Kalmucks, a wild Tartar race, affect a beverage called *koumiss* which is made from mare's milk.

In all climes men feed just in proportion to their cultivation; and in conditions of extreme barbarity the animal man is but little above the brutes devoid of reason. Instinct governs the appetites of savages; and they are filled to repletion to-day, while to-morrow they starve.

The productive capital in British railways is estimated at two thousand millions of dollars.

## MACHINISTS AND THE SANITARY COMMISSION.

Our friends, the machinists, will feel pleased to know that their services in behalf of the sick and wounded soldiers, as well as their loyalty and devotion to the interests of the whole country, are not forgotten or overlooked. The *Spirit of the Fair*, a daily journal published during the recent exhibition in this city, pays this well-deserved compliment to the trade in question:—

"Perhaps no class of contributors to the Fair has done more substantial work for the cause, in shorter time, than the machinists. The Government has required lately from this most useful class so much labor at high speed and under great pressure, both mental and physical, that it is wonderful that they have been able to devote so much time and effort to the Fair as they have done. The committee on this class of contributions, too, was one of the latest formed, and had but three or four weeks for preparation. Besides the donations in kind and articles of machinery, engines, &c., sent in for exhibition, money has been contributed through this committee to the amount of nine thousand five hundred dollars, much of it through liberal subscriptions from the workmen themselves in the shops. If any stronger evidence of enlightened generosity can be found among the high-toned chivalry of the South, than has been shown in this and other instances by the greasy mechanics of the North, we should be glad to be reminded of it. One single contribution, by a working engineer, is that of a steam engine worth seventy-five dollars."

We think the above paragraph is about the best thing that has appeared in the *Spirit of the Fair* since its commencement. It has had very little "spirit."



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42,336.—Propeller Engine.—Edward David Ashe, Brompton, England:

I claim the combination of the two engine cylinders, A, A', piston rods, a, a', guides, b, b', drivers, h, h', ways, C, C', and propeller shaft, B, formed with a plurality of intersecting spiral grooves, d, d', having two or more revolutions in the said drivers, h, work on opposite sides of the said shaft, B, one in each of the grooves, d, d', and all the parts are constructed and arranged to operate in the manner and for the purpose herein specified.

[The principal object of this invention is to obtain a high velocity of shaft with out gearing, or in other words, to obtain two or more revolutions of the shaft of an engine from one stroke of the piston; and it consists in a certain construction and arrangement of a spindle grooved shaft in combination with drivers attached to the piston rods for this purpose.]

42,337.—Fluid Meters.—Edward John Baker, Philadelphia, Pa.:

I claim, first, The arrangement substantially as described, within a box or casing to which the fluid to be measured is admitted, of two measuring cylinders, with their reciprocating pistons, and with any system of valves, valve-seats and passages for admitting the fluid to, and discharging it from the said cylinders.

Second, The arrangement beneath the measuring cylinders of the slide valves J, the valve seats and ports substantially as specified.

Third, This arrangement substantially as described of the passages C and C', and exhaust passage, D, beneath the valve seats.

Fourth, The slide valves J, J, arranged in respect to each other and operated by a crank or eccentric on the central shaft, L, substantially as specified.

Fifth, The two cylinders with their reciprocating pistons in combination with the shafts, Q, arms, S and S', rods, T and T', arm or crank, U, and central shaft, L, the whole being arranged for joint action, substantially as and for the purpose herein set forth.

Sixth, The piston, G, composed of cups, m, and m', of leather or other like material and perforated plates, n, and n', all being constructed substantially as specified.

Seventh, The shaft, V, passing through the cover plate, A', of the box, and having an arm or carrier, W, in combination with the central shaft, L, and its arm, U.

42,338.—Caster Wheel.—Thaddeus Beach, New York City:

I claim a caster wheel or roller having its fork or support, F, attached to a circular plate, E, provided with an upper beveled or inclined surface, d, and fitted within a circular box, A, having an inclined or beveled under surface, a, with conical rollers, C, interposed between the inclined or beveled surfaces, a, d, and either with or without the frame, B, substantially as herein set forth.

[The object of this invention is to reduce friction in the turning of the support of a caster wheel or roller while the latter is adjusting itself to the line of the movement of the article to which it is attached

and at the same time admit of the wheel or roller being near the center of its support, whereby a more direct bearing than hitherto is obtained on the caster wheel or roller, and the latter made to act much more efficiently in supporting the article which sets upon it.]

42,339.—Holder for Butter Knife.—Henry Benton, Guilford, Conn.:

I claim the employment or use of the clasp, B, with spring socket, C, in combination with a plate, A, or its equivalent and with a knife, D, substantially in the manner and for the purpose herein shown and described.

[The object of this invention is to produce a simple and neat device which can be readily clasped to the edge of a plate or dish, and which is provided with a spring socket to hold a knife in such a manner that the knife is prevented slipping off from the plate or dish and soiling the table-cloth.]

42,340.—Anti-friction Stamper for Metallic Ore.—Joseph A. Bertola, New York City:

I claim, first, The movable bottom plate, r, and elastic bed, s, in combination with the hopper formed with a chute on one side receiving the ores to be pulverized, and a spout on the other for the delivery of each ore, as specified.

Second, I claim forming the rod or handle for stampers of two metallic bars, between which the roller, f, for the lifting cam is fitted and which handle is grinded by fixed rollers, g and l, between such bars as and for the purposes specified.

42,341.—Chilian Mills for Pulverizing Metallic Ore.—Joseph A. Bertola, New York City:

I claim the cross-head, l, on the shaft, g, with the chains or links, m, m, in combination with the axle, n, and pulverizing rollers, o, o, o, as and for the purpose specified.

42,342.—Fire-place.—Walter Bryant, Boston, Mass.:

I claim the above-described improved open fire-place as constructed with the air-heating chamber arranged about and so as to extend above its grate and the ash-pit or box, and open into the latter, in manner and so as to operate substantially as hereinbefore explained.

42,343.—Car Coupling.—Henry A. Buck, Meadville, Pa.:

I claim the drop, B, curved and fitted in grooves or recesses in the draw-head A, as shown, in connection with the coupling pin, C, and link or shackle, G, all arranged to operate substantially as and for the purpose specified.

[This invention relates to a new and improved car coupling of that class which are commonly termed self-coupling, and it consists in the employment or use of a suspended drop placed within the draw-head and arranged in such a manner as to support the coupling pin when the latter is set or adjusted for coupling, and at the same time so arranged as to be out of the way of the link or shackle, when the latter enters the draw-head, and prevented from being acted upon by the link or shackle until the latter reaches the proper point to receive the coupling pin, thereby avoiding a casual dropping of the coupling pin before the link or shackle can receive it.]

42,344.—Photographic Printing frame.—Orrin H. Burdick, Auburn, N. Y.:

I claim the combination of the bowed or arched springs on the back, with the pivoted and horizontally turning arms on the frame, both the springs and arms having at least one free end, for the purpose of lifting and regulating the pressure of the back, pad, and paper, to the glass in photographic printing frames, substantially as described.

44,345.—Bilge Blocks for docking Ships.—Phineas Burgess, Brooklyn, N. Y.:

I claim, first, The transverse self-adjusting top-piece, C, arranged upon the bilge block to operate substantially as and for the purpose herein specified.

Second, Combining the adjustable upper portion, B, of a bilge block, with the base, A, by means of one or more adjusting screws, F, substantially as and for the purpose herein specified.

42,346.—Anchor.—C. A. Chamberlain, Alleghany City, Pa.:

I claim, first, The reverser, C, constructed and applied to an anchor to operate substantially as herein specified.

Second, The elevator, E, applied and operating substantially as herein described.

Third, The depresser, E, applied and operating substantially as and for the purpose herein set forth.

Fourth, The guard, G, G, applied and operating substantially as herein described.

Fifth, The combination of the two flutes, A, A, arranged side by side, the reverser, C, elevator, E, depresser, F, and guard, G, substantially as herein set forth.

42,347.—Wooden Pavement.—Wm. H. Chappell, St. Louis, Mo.:

I claim the construction of wooden pavement with lumber which has been saturated with carbolic and cresylic acids or sulphate of iron and soluble glass, coated with pitchy mastic, from well oil residua, heavy oil and pitch from gas tar, and laid with cement made from sand, gravel, lime, pyrites, resinum, and soluble glass, covered with pitchy mastic, substantially in the manner as described in the specification.

42,348.—Grain-dryer.—George Clark, Buffalo, N. Y.:

I claim, first, The formation of hot air supply and evaporation escape passage through a body of grain by means of the horizontal perforated tubes, B and B', the hot air tubes opening at one end through the kiln wall into a hot air chamber, E, and closed at the other end, and the evaporation tubes opening at one end into an evaporation chamber, on the opposite side of the kiln and being closed at the other, substantially as described.

Second, In the formation of a hot-air chamber, E, divided into compartments by the floors, E', and the combination therewith of a hot air conducting flue, H, leading from the furnaces, the opening of the flue into said compartments being provided with regulating registers, substantially as described.

Third, The triangular or V-shaped tubes, B, B', having open base (with or without perforations), for the purposes and substantially as described.

Fourth, In so arranging the alternate rows of hot air supply and evaporation escape tubes (or passages) that kiln will pass alternately over hot air and evaporation tubes substantially as described.

Fifth, The combination of the hot-air supplying, and exhausting tubes, B, B', constructed and operating as described, with the regulating valve, N', substantially as set forth.

42,349.—Construction for Defense of Ships of War, and of Defensive Armor for Fortifications.—Owen Collins, New York City:

I claim, first, The employment in the hull and turrets of a vessel or in fortifications, of a framing composed of independent tubular wrought-iron ribs, B, B, constructed and arranged as herein described.

Second, The external coils of steel wire, a, a, in combination of the aforesaid independent wrought-iron tubular ribs, as and for the purpose herein set forth.

Third, The employment in combination with the independent wrought-iron ribs, B, B, of surrounding casings b, b, of india-rubber or its compounds substantially as and for the purpose herein set forth.

Fourth, The combination of the framing of wrought iron tubes B, B, inner and outer skins, c, d, and corrugated plates, e, e, substantially as herein specified.

[The principal object of this invention is to obtain great impenetrability to projectiles with little weight and consequently with a high degree of buoyancy; and to this end it consists, firstly, in the employment in the hull and turrets of a vessel, of a frame composed of wrought-iron tubes arranged in the form of ribs; secondly in the reinforcement of such tubes for coils of steel wire to give them greater strength, and to aid by its elasticity in increasing the resisting power of the tubes; thirdly, in the employment between such tubes, of casings of india-rubber, or any compound thereof, to give them greater capability of resisting; and fourthly in the employment in combination with such tubes, of plates of corrugated iron applied in such a manner as to seam the said tubes together, and to attach inner and outer skins of smooth iron plates.