#### Parisian Toy-Making-Utilizing Waste.

Any one who has ever walked through one of the great toy-importing houses in this city at holiday time, and perhaps wondered at the taste and ingenuity displayed by the French workmen in devising many of the most beautiful playthings, would hardly imagine that waste and refuse materials, very odd ones too sometimes, are largely used in the Parisian toy industry. Elegantly dressed dolls, tricked out in all the refinements of the latest fashion, and which fetch incredible prices on this side of the Atlantic, are frequently costumed from the cast-off stage clothes of actresses in the theatres, purchased for a mere song, or from the useless garments remaining in theatrical wardrobes after a play has had a long run. The coverings of old purses and pocket books, fished out of the gutters by sharp-eyed ragpickers, furnish the material for the doll boot maker. Old sardine boxes and cans yield their plate to the manufacturer of barrels for toy guns. The little wooden or metal wheels which support movable toys are obtained from the refuse of any industry in which articles having circular openings are made. French cruet stands, usually of wood and having holes for bottles, provide thousands of such disks, removed in making the apertures. All the solder and pewter that can be extracted from old roofing and water spouts, or workshop scraps is pressed into service for the manufacture of dolls' knives the aid of drawings. and forks, tea sets, etc.; and even the ancient lead coffins dug out of the old cemeteries at Nuremberg, the French toy maker utilizes in the manufacture of lead soldiers. No other nation equals the French in converting the ordinary refuse of the street and workshop into useful and ornamental products. It is this characteristic for saving which makes the French nation so prosperous.

#### Cooking by Cold.

It is a curious fact, not generally known, that the action of intense cold on organic substances is similar to that of a high degree of heat, and that, when subjected to a very low temperature, meat can be brought to a condition similar to its state when cooked by actual warmth. Quite recently a Hungarian chemist, Dr. von Sawiczewsky, who, it appears, has investigated all the various ways suggested for preserving meat (by chemicals, cooking by heat and hermetically sealing, etc.), and has found points of objection to all, has attempted the preparation of the material by subjecting it in a perfectly fresh state to a temperature of 33° below zero, Fah., and sealing it afterwards in tins. The results obtained have been highly satisfactory; the meat on being removed from the cans appears, in point of smell and color, as fresh as if just taken from the butcher's stall. Although partially cooked, and thus requiring less fuel to complete its preparation for the table, it is entirely without the taste of meat which has been partially subjected to any heating process, and may be roasted, boiled, or otherwise treated, the same as if it were fresh. A commission appointed by the German governments has lately conducted a series of careful and successful experiments upon the process; and as a final test two corvettes of the German navy, being about to circumnavigate the globe, have been supplied with a large stock. An extensive factory is being erected in Hungary for its manufacture.

## DECISIONS OF THE COURTS.

# United States Circuit Court---Southern District of New York. PATENT CORSET LOOM.—HUGO CARSTARDT 75. THE UNITED STATES CORSET COMPANY.

The defendant's mechanism does not infringe the first or third claims of the patent. The defendant's take-up is materially unlike the corresponding parts of the plaintiff's machine, and their needle bar is not in combination with the sectional rollers or wheels, which are described in the plaintiff's

with the sectional rollers or wheels, which are described in she plaint.

The take-up, which is mentioned in plaintiff's second claim, does not mean every kind of take-up, or the take-up in every kind of loom, but refers only to take-ups which are designed for or adapted to the weaving of irregular fabrics.

The plaintiff's needle bar is placed in such relation to the cloth and to the take-up, and by means of such position it is enable to accomplish a result which had previously been unattained in corset weaving.

take-up, and by means of such position it is enable to accomplish a result which had previously been unattained in corset weaving.

Bhipman, J.:

The patent which is alleged to have been infringed by the defendant was granted to the complainant on March 36, 1869, for an improvement in take-up mechanism for looms for weaving irregular fabrics, and was reissued on November 19, 1872. The patented machine was designed expressly for the weaving of corsets. In weaving articles of irregular size, it is necessary to give greater fullness to one side or portion of the woven articles than is given to another portion. The cloth, notwithstanding this irregularity, is woven in one piece, so that sometimes the weaving proceeds regularity, is woven in one piece, so that sometimes the weaving proceeds regularity, so wose in one piece, so that sometimes the weaving proceeds regularity across the whole width of the fabric, and sometimes irregularly across an increasing part of the width. \*

The defendant's mechanism is also a take-up mechanism which is adapted to irregular fabrics, but is not sectional in its character. A sectional take-up is one which takes up the cloth only on some parts of the fabric, while the rest remains unmoved; that is, the rolls which are used to take up the cloth are divided in sections, and can be used independently of each other. The defendant's take-up consists of an endiess sheet or sheets of rubber, pressing the fabric against a roller.

It is strongly contended by the defendant that the complainant's needle bar is anted sted by the needle bar which is described in the French patent, dated October 2, 1845, to Messrs, Bender, Bandler, and Madame Gobert. The devices mentioned in these sheet, and exhibited in the drawings, are some what complicated; but the needle bar, which in one part of the specification is styled a rotary bar, seems to have been either a rotary bar or a fixed bar attached to a movable traction box, or traction slide, and not in any proper sense of the word a stationary bar; it di

[J. Van Santvoord, for complainant. Geo. Gifford, for defendants.]

#### United States Circuit Court-Southern District of New York.

THE GOODYEAR DENTAL VULCANITE COMPANY AND OTHERS US. EBEN M. FLAGG.

The courts have determined that the construction to be Riven plaintiff's patent was india rubber, "and the compounds commonly employed there with reduced to a soft plastic state, capable of vulcanization, and subsequently vulcanized."

In the process described by defendant he does not use india rubber of ntly vulcanized.''
I the process described by defendant, he does not use india rubber, or substance capable of vulcanization. The substance used by him is renatchford. J.

dered plastic, and not hardened by heat.
Blatchford, J.
I do not find that any decision has been made in regard to the plaintiff's patent, which gives to it such a construction as necessarily includes the process and substance used by the defendant.

In the Gardner case the defendant did not compound india rubber with suphur, but he compounded indiarrubber with lodine, and he employed heat to harden the rubber (Goodyear Dental Vulcanite Company vs. Gardner, 4 Fisher's ratent Cases, 224, 231.)

In the Smith case the view of the court was that the material to be used under the plaintiff's patent in carrying out the invention patented was to be indiarubber, "and the compounds commonly employed therewith reduced to a soft plastic condition, capable of vulcanization and subsequently vulcanized." Goodyear Dental Vulcanite Company vs. Smith, 5 Official Gasette of Patent Office, 585.)

It appears from the description of the process used by the defendant in this suit that he does not use india rubber or any substance capable of vulcanization; that the substances he uses is one which is rendered plastic by heat, and is not hardened by heat; that heat is used in the process to soften the substance, and render it plastic, and not to harden it, and that the substance, after being molded, is hardened by being cooled. It is not sufficiently clear that this processis embraced in the claim of the plaintiff's patent to warrant the granting of an injunction until one is awarded as the result of a decree for the plaintiff on final hearing.

(E. N. Dickerson and B. F. Lee for the plaintiffs.

W. D. Shipman, C. A. Seward, and E. Luther Hamilton for the defendant

#### Becent American and Loreign Latents.

#### NEW MECHANICAL AND ENGINEERING INVENTIONS.

IMPROVED STONE-DRESSING AND SAWING MACHINE Silas Steinbeck, Chicago, Ill.—This invention consists of rotary awing and surfacing cutters, having recesses or notches of peculiar form, to admit the sand between them and the stone; and it also consists of improvements in means for feeding the sand to the cutters, which consist of a slowly rotating screw, which throws the sand over the edge of the trough on to conductors down which it flows to the stone at the cutters.

#### IMPROVED SPRING MOTOR.

Edwin Lambkin, Sebewaing, Mich.—This is an improved spring power for running street cars. railroad hand cars, road vehicles, and driving machinery. The invention consists in the peculiar construction of a spring drum, and in means for applying a brake and operating a shifting mechanism, the whole of novel and ingenious construction, but hardly possible to explain clearly without

#### IMPROVED CROSSCUT SAW HANDLE.

Samuel Boone, La Gro, Ind.-We have here an improved mode of attaching saw handles to the saw. There is a ferrule, with a perforated rubber block in the closed end thereof, a saw-binding clamppiece, which is securely attached to the handle by a binding block, with saw-fastening clamps, and a shank with threaded end that extends into a perforation of the handle to be screwed thereon. A rubber cushion and washer at the bottom of the ferrule produce the secure attachment of handle to ferrule and block. The saw is recessed both at the back and side edge, to apply the handle longitudinally or at right angles to the saw

#### IMPROVED BACKLASH SPRING,

Thomas Alsop, Elkhart City, Ill.—This inventor proposes a new back lash spring for mill spindles, shaftings, etc., which bears equally on the pinion at both sides of the shaft, and takes up the backlash uniformly throughout the whole length of the spring. The invention consists, mainly, of one or more springs, coupled together and applied at one end by a fixed sleeve or clutch to the shaft, and at the other end to a loose disk that engages, by stops or pins, the pinion that transmits the power to intermeshing gearing. The springs are rendered durable, as no friction or tensile strains are exerted thereon.

#### IMPROVED SAW GUMMER.

Jason W. Mixter, Templeton, Mass.—This inventor now improves on the saw gummerfor which letters patent have beengranted to him under date of June 23, 1874, so that the carriage, which is formed with a quadrantal slot at each end, is allowed to swing freely upon screws which pass through said slots and enter the main frame, admitting thereby the changing of the line of cut from the horizontal to the perpendicular without moving the cutter from its place, and without necessitating the readjustment of the machine.

## NEW AGRICULTURAL INVENTIONS.

## IMPROVED BEE HIVE.

William L. Hamilton, Glasgow, Ky.-This bee hive is provided with the latticed frames, working in and out of the upper chamber on slides, and held detachably together by wires, to be opened readily for taking out the honey.

## IMPROVED HAY RAKER AND LOADER.

George Lambert, Hill Grove, O.—This is a new machine for gathering hav and loading it upon a wagon in a compact form. The hav is elevated by an endless apron having cross bars and swinging arms with spikes to collect the hay. Guides raise the arms from a horizontal to a vertical position as the apron lifts the hay, thus compressing the same.

## IMPROVED PLOW HANDLE.

William A. Couch, Hannibal, Mo.—This is an open work metal handle, easily attached to the upright of the plow stock by a single bolt. The novelty lies in the construction, which is such as to en sure strength as well as lightness.

## IMPROVED GANG PLOW.

Enoch C. Eaton, Pinckneyville, Ill.—This invention includes several new and ingenious devices by which the plows can be readily adjusted to work deeper or shallower in the ground, which will hold the plows from lateral play when at work. Suitable new arrangements also enable the plows to be easily raised from the ground.

## IMPROVED GUANO DISTRIBUTER.

Richard A. Barrett, Newsome Depot, Va.--This relates mainly to combining with the distributing cylinder an axle having long jour nals, frame bearings, flanges, and nuts. When nuts are screwed up, the distributing cylinder is compelled to turn with the axle but when the nuts are loosened, the weight of the distributer will hold the axle still while the wheels revolve upon its journals.

## NEW CHEMICAL AND MISCELLANEOUS INVENTIONS.

## IMPROVED REFRIGERATOR CAR.

Arnold W. Zimmerman, Denison, Tex., assignor to Samuel Pillsbury, New York city.—This inventor has devised a new refrigerator car for preserving fresh meats, vegetables, and other perishable articles while transporting them over great distances. There is an ice receptacle at the top of the car, provided with flat top and curved and inclined bottom. Above the ice receptacle an air space is formed, that communicates, by side spaces, with the main part of the car, for conveying the warm air and vapors to the ventilators above the air space. The condensed moisture is collected by a longitudinal inclined trough below the lowest part of the ice recentacle, to be conveyed to the outside. The ice water of the receptacle is drawn off by end pipes and stop cocks.

## IMPROVED SHAWL STRAP.

Frederick Turner, Frankford, Phila., Pa.—This consists in a combination of straps with a handle, which terminates at each end in a spring hook for connecting the straps, so that they can be connected and disconnected readily. It also consists in the combination of a cross bar, having a hook, with the handle and strap.

## IMPROVED SPRINKLER

John C. Melcher, Black Jack Spring, Tex.—This is a short drum, with the inlet for receiving the water on one side and the orifices for discharging the water on the opposite side. The device has the effect of causing the water to emerge in solid jets, capable of reaching over a wide range of area.

#### IMPROVED CENTER BOARD,

William Austin, Apalachicola, Fla.-These center boards do not differ from the usual single center boards, except they are each placed obliquely to, instead of parallel with the keel of the vessel or boat. By virtue of the angle at which the center boards are placed the vessel is set to windward, and made to run much closer to the wind than vessels having the ordinary center board.

#### IMPROVED SPARK ARRESTER.

Royal P. Faries, Wichita, Kas.—This consists of a wire netting ection in the smoke stack for the escape of the smoke. The cinders are allowed to pass above into a trap formed by a close cover over the pipe and a contraction of the top of the latter, from which they are conducted back into the smoke arch through pipes passing down the side of the smoke pipe through the saddle.

#### IMPROVED SCHOLAR'S COMPANION.

William A. Harwood, Brooklyn, N. Y.-The object of this invention is to provide for use of school children a pocket companion or case for pencils, pens, etc., which shall possess a shape best adapted to enable it to withstand the rough treatment to which it will ordinarily be subjected in actual use, and to prevent rapid wear of the pocket in which the case is carried. The box is formed of a single sheet of tin, bent to form rounded sides, the bottom being nearly flat. The ends are formed of separate pieces of conical forms, and are fastened on said body so as to inclose its ends. The cover is a mere strip of tin with parallel edges, and is fitted to slide forward and backward in grooves.

#### IMPROVED MUZZLE,

August Miller, Salina, Kas.—This is an improved muzzle for calves, by which they can be effectively prevented from sucking the cows when in the same inclosure with them, without being hindered from grazing or getting other food. A full top muzzle frame with a swinging front plate has hinged and spurred side piates, the whole being attached to the head by suitable fastening straps. The swinging side plates have inward projecting catches, that bear on the top frame, and prevent the front and side boards from swinging away from the mouth.

#### IMPROVED LIFTING JACK.

Samuel E. Mosher, Chillicothe, Ohio.—This is an improved lifting jack, which may be made entirely of cast iron, and adjusted to any suitable hight to support the weight to be lifted in a safe and reliable manner. A hollow standard guides a tubular and toothed lifting bar, into which the toothed and lever acted block enters that raises the lifting bar to support the same on differential toothed spring pawls at any hight. The actuating lever is made of two sections, fulcrumed to oscillating pieces of the main standard and pivoted to the lifting block.

#### IMPLEMENT FOR FORMING BARBS ON WIRE FENCES.

James H. Hill and William H. Jayne, Boone, Iowa.-This is an improved implement for forming barbs upon the wires of a wire fence easily and quickly, and in such a way that the barbs will retain their places securely. By suitable construction the barbs are firmly twisted around each other and around the fence wire.

#### IMPROVED HAIR RESTORATIVE COMPOSITION.

Mrs. Anness R. Kinyon, Downer's Grove, Ill.—This improved restorer consists of extract of wild grape vine, with which is combined salt and castor oil, to cleanse and heal and prepare the scalp for the restoring properties of the grape vine. The alcohol is combined in sufficient quantity to cut the oil and keep the preparation

## EXTENSIBLE FRAME FOR WINDOW SCREENS, ETC.

John R. Simpson and George W. Simpson, New York city.-This improved frame, though designed especially for a fireboard frame, may be used for a window screen frame. It is so constructed that it may be readily expanded and contracted, to adjust it to fireplaces and windows of various sizes.

## IMPROVED BOILER TUBE STOPPER.

Peter Walker, Jersey City, N. J.-This consists of a spring packing ring and a clamp for expanding it for each end of the boiler tube. The clamps are formed of a collar on each end of the tube. Other collars on a rod pass through the tube, and are fixed so as to clamp and expand the packing rings tightly into the tubes of the boiler. The rod and tube of the stopper are of suitable length to fasten the packing rings into the tube at the ends. A stopper of this kind can be put in a locomotive or marine boiler, by the aid of suitable tools, without stopping the fire.

#### NEW WOODWORKING AND HOUSE AND CARRIAGE BUILDING INVENTIONS.

## IMPROVED DUMPING WAGON.

Jacob Kramer, New York city.—This is a dumping wagon having the seat mounted upon the front truck, and the body hinged at or about the middle thereof to the rear axle, whereby the rear axle bears the greater part of the load, and the body turns clear of the

## IMPROVED WHIFFLETREE.

Remus D. Hale, Transitville, Ind.—This consists of a dovetailshaped projection on the under side of the whiffletree sliding into a corresponding grove in the top of a stud pivoted in the evener, and fastening by a snapspring, so as to be easily and quickly connected and disconnected.

## NEW HOUSEHOLD ARTICLES.

# IMPROVED COFFEE POT.

Louis C. Lomer, New York city.—In this coffee machine a liquidholding vessel (provided with an internal arrangement of strainers and a discharge pipe leading from the bottom thereof) is supported in or upon a detachable stand or pedestal. The improvement relates particularly to the construction of the stand, which has semicircular hinged covers, which are left open while the alcohol is burning, and closed to extinguish the flame.

## IMPROVED DOOR AND GATE SPRING.

Levi Gallaher, Businessburg, Ohio.—This spring is so arranged as to throw back the gate whenever the latter is opened only sufficiently to allow passage through. When the gate is pushed open more widely, devices prevent the action of the spring.

## IMPROVED IRONING TABLE.

John L. Young, Foxburg, Pa.-To this improved ironing board the shirts may be readily applied, and then securely retained in stretched state for ironing. There is a dovetailed recess at one end, to which the collar band is attached by a fastening key, and also a dovetailed stretching block, to which the lower part of the bosom is keyed. The block is guided in the recess at the opposite end of the board by a projecting bottom edge, and locked to the ratchet teeth of the recess.

## IMPROVED BOILER WASHING MACHINE,

William B. Rodeckerand Frank C. Pifer, Eureka, Ill.—This invention relates to the arrangement of parts, whereby the clothes are turned in the cylinder and prevented from becoming packed too closely against the sides thereof; also, whereby the cylinder is held in the middle of the boiler.