The claim in the reissue which, it is urged, avoids it is as follows:

A shirt collar composed of paper and muslin, or its equivalent, so united that the muslin will counteract the fragile character of the paper.

Construing this in connection with the specification, its obvious import is that the patentee sought to secure as his invention a shirt collar composed of paper and muslin, or its equivalent, united by paste, glue, or other appropriate sizing, by means of which union the fragility of the paper is reenforced by the fibrous strength of the muslin, and the necessary cohesiveness of the fabric is thus secured.

Does the defendant infringe this patent?

Hunt's invention consists of two elements or parts: First, of a collar, with reference to the materials out of which it is made, and their union, so as to secure certain qualities; and, second, of the subsequent manipulation of this collar, by which a smooth surface is given to it, and it is rendered impervious to moisture.

The defendant manufactures and sells shirt collars made of muslin or linen cloth pasted to a sheet of paper. Fundamentally they are the same with the collar described in Hunt's patent, because they are composed of muslin (or its equivalent) and paper, so united as to utilize the same properties contemplated by Hunt in the union of the same elements. But it is sought to differentiate them, for the reasons that the defendant attaches a sheet of paper to but one side of the cloth, and that the collar is turned down with the cloth surface only burnished and exposed to view.

The first reason rests upon an undue limitation of the scope of Hunt's invention. In his original patent, in explaining a mode of carrying his invention into practice, he describes a collar with paper on both sides of the cloth. Although he does not limit himself to any form of collar, yet the description is evidently applicable to the standing collars then in fashion, and the double coating of paper was suggested as best adapted to collars of that class. But, as has already been said, his invention was more comprehensive than this, and it was clearly indicated in his original specification. It is appropriately claimed in the reissued patent in controversy, the authorized purpose of which was to protect it fully. Clearly the terms of that claim are broad enough to embrace the collars made by the defendant; but, at any rate, I do not think a double coating of paper on one side of the cloth changes the identity of the fabric described by Hunt. It is still composed of the same constituents, so united as to embody the same properties which he first proposed to utilize, and the difference is only apparent and formal. Characteristic resemblance is the fairest test of substantial identity.

Nor is there any better foundation for discrimination in the fact that the defendant's collars are turned down and the cloth surface only is exposed to observation. Hunt's patent is not limited to any particular form of collar, and the polishing of the cloth surface pertains exclusively to the manipulation of the collar, after it is made, to fit it for use. It does not, in any sense, change the fundamental character of the fabric out of which it is formed, and therefore does not affect the applicability of the first claim of the reissue.

The defendant also manufactures collars entirely of paper, with patches of muslin pasted around the buttonholes to give additional strength at these points; and these are claimed to infringe the patent. I do not think so. Hunt did not contemplate any such restricted combination of paper and muslin. His collar was composed, throughout its whole body, of paper and muslin, and this was necessary to secure and embody the properties which he intended to make available. Nor could he successfully claim such a device. He did not invent paper collars, nor the application of cloth to button holes to strengthen them. Such reenforcement had been long before applied to buttonholes, in leather curtains, sails, and other fabrics. It merely, therefore, the application of an old device to an analogous and well known use, for which no one could obtain a patent.

The complainants are entitled to an injunction, to continue in force until the 25th day of July next, when the patent will expire, and to an account, and a decree will be entered accordingly.

[*George Harding* for complainant.
J. J Coombs and *E. Wetmore* for defendant.]

In Memoriam.

U. S. PATENT OFFICE,
Washington, D. C., April 24, 1875.

Hon. S. H. Hodges, who died on the 20th of this month, was appointed Commissioner of Patents by President Fillmore in the fall of 1852, and remained as such until the incoming administration of President Pierce.

In 1861 he was appointed a member of the Board of Examiners-in-Chief, and remained its senior member until his death.

Of the many excellent qualities of the deceased, his eminent learning, his patience, his courtesy, and deep sense of justice were the most remarked.

Out of respect to his memory the Patent Office was closed at 12 M. the 23d of this month, by order of the Commissioner of Patents.

At a meeting of the Examiners and employees of the Office, at which the Commissioner of Patents presided, the following resolutions were passed, expressive of the high sense entertained of the worth and talents of the deceased:

Resolved, That we recognize in the death of our late associate, Hon. S. H. Hodges, a grievous loss, both to the Office and to ourselves personally. His long connection with the Bureau as Commissioner and Examiner-in-Chief, his large experience in its affairs, his laborious habits, his accurate and careful observation, his just and impartial judgment and unswerving integrity, all combined to make his services invaluable. Our personal connection with him has been make pleasant by the kindness of his disposition and by our confidence in him as a man—upright and beyond reproach. His removal from us by death is no ordinary event. We grieve that we shall enjoy his society and counsels and see his venerable form no more. The memory of his character and example as a true and faithful man we shall cherish as sacred, and the best legacy that man can leave to men.

Resolved, That we deeply sympathise with his family in their affliction, and in testimony of our respect and sympathy forward them a copy of these resolutions, and will attend the funeral in a body.

Recent American and Foreign Patents.

Improved Milk Cooler.

Addison P. Myers, Prattsville, N. Y.—This invention relates to improvements in milk coolers, by which a regular flow of cold water around the pan is secured, a better support of the milk pan produced, and a tight faucet connection of pan and vat without leakage obtained. The improvements consist in supporting the vat on a longitudinal rubber-lined partition strip, and a vertical extension of the same at the partition wall between water chamber and vat, compelling the water to enter at one side of the partition and leave through a waste pipe at the other. A rubber sleeve with a top collar fits snugly around the exit pipe of the pan, and into the exit pipe of the vat, and connects the same without leakage of water.

Improved Rock Drill.

William W. Goodwin, National P. O., Iowa.—The mortises in the trimmers are so contrived, in respect of the distance from the tenons, that the lower gib will press down on the lower end wall of the mortise in the blade, while the upper gib presses the trimmers at the upper end of the mortise in them, and thus binds the trimmers firmly endwise by pressing them into the sockets, while the heads of the gibs keep the trimmers against the side of the blade.

Improved Car Brake.

Sebastian Gilzinger, Glasco, assignor to himself and Abel A. Crosby, Kingston, N. Y.—A car frame of the usual construction is provided with the common pin and link coupling. In connection with the coupling is arranged, at each end of the car, on the platform or top, a wheel and lever mechanism that is connected at one end to the coupling pin, while the other end may be placed in connection with the bell rope of the locomotive, which rope has to pass over a pulley below the lever, so as to actuate the same from the locomotive for uncoupling the drawheads whenever required in case of danger or accident. The bell rope has to be applied to the front lever of the last car; but the uncoupler may be operated also directly by the conductor or automatically by the accidental detaching of any car, so that a whole train can be brought wholly within control from any part thereof.

Improved Wagon Seat.

Sebastian Gilzinger, Glasco, assignor to himself and Abel A. Crosby, Kingston, N. Y.—This is an improved spring seat for vehicles which may be readily swung out of the way, if required, for loading, and adjusted to any desired hight above the wagon body. The invention consists of a seat hung by stationary corner braces to the ends of strong spiral springs, which are secured by their middle parts to sliding standards, which are adjustable by links and guide bands on the stationary side standards of the seat.

Improved Dental Articulator.

Charles D. Cheney, Canandaigua, N. Y.—On the lower plate is an extension, the circular edge of which is serrated and enters the slotted end of a shaft, where it is confined by the pivot pin, which allows it to be raised and lowered to form any desired angle with the shaft. The shaft is a tube, and a screw works therein, the end of which engages with the serrated edge of the extension, and thereby holds the plate in any desired position. A saddle on the shaft allows of the latter sliding and rotating when not held by the set screw. By suitable devices the two parts of the articulator may be placed (after being separated) in the exact position they occupied, and the upper plate may be turned in any position on the pivot rod and fastened wherever desired. The arrangement of the plates (or jaws) is such that they can be moved near each other, and thus diminish the quantity of plaster used in making the mold.

Improved Apparatus for Operating and Locking Switch Signals.

Smith H. Finch, care H. Moore, 7 Park Place, New York city.—The levers for locking and levers for moving the switches or signals are made to work from one side to the other side of a frame, and lock and unlock the switches and signals thereby, locking bars provided with two shoulders each catching and holding the levers. These locking bars have at each end a portion turned at a right angle, and through which portions are pivot bolts, upon which the bars turn. These angular portions have each a slot in their extreme ends, which engage with latches which work in slots through the frame confined by joint pins. The latches are connected together by the bars on the outside of the frame which are parallel therewith. The inner ends of the latches are curved and slotted much like the end of a wrench, and receive a staple on the levers, and thereby hold the lever in a locked position, while the bars are locked by other latches, which are thrown into the slots in the angular portions. When the other lever is unlocked, the switch or signal levers are locked.

Improved Hand Corn Planter.

John W. Cleland, Nevada, Mo.—In using the planter the handle is grasped by the hand, and, by pressing downward with the outer part of the hand, a lever will be operated to force the slide back into the seed box; then, by relaxing the grasp of the hand, the slide will be forced forward by springs, dropping the seeds into the space between the boards. The plates are then forced into the ground, and a lever is again operated, to force the dropping slide to the rearward. This movement separates the plates and allows the seed to drop into the ground. The planter is then raised from the ground, and, as it is being carried forward to the place for the next hill, the hand is again relaxed, and the seed for the next hill is dropped into the space provided. The principal advantage of the device is that but one hand is required for its manipulation.

Improved Horse Collar.

Thomas Cheal, St. Paul, Minn.—This is a wooden horse collar, consisting of two back pieces hinged at top, front pieces beveled to receive the hames, and a padding secured between the parts. The broader back piece carries the trace away from the shoulder, so as not to bruise the same. The collar is stronger and better fitting than the common kind of collars in use, and may, with suitable iron bindings, be used advantageously for the heaviest work.

Improved Detachable Ash Pan for Stoves.

Albert T. Bleyley, Conception, Mo.—A perforated bottom and drawer extends under the entire stove, in addition to the ordinary stove grate, so that the coals which drop from the stove grate will rest on the bottom, while the ashes will pass through into the ash drawer. When the grated bottom and drawer are intended only for the hearth, the hearth is made on a level with the bottom of the stove.

Improved Insertable Saw Tooth.

Erasmus Smith, Norwich, N. Y.—The saw plate and the tooth wedge are provided with openings, arranged with the joint of wedge and plate diagonally, one portion in the wedge and the other in the plate, so as to allow the said wedge to be tightened against or loosened from the tooth by keys.

Improved Hay and Grain Elevator.

Thomas Powell, Stockton, Cal.—Two sections of netting are attached to stretchers of wood. The stretchers connect the sections together by hooks and eyes, also by a revolving hook, which has a crank for turning it by a trip cord, for unlocking the sling. This crank is held fast by a spring catch until it is required to unlock it. The sling is spread upon the bed of the wagon to be loaded, with the ends so disposed that they can be connected to the derrick hook when the load is to be removed. After the load is removed and laid on the stack the two parts of the sling are unlocked by the trip cord, so as to disconnect and pull out from under the load, and leave it when the derrick chain is hoisted.

Improved Preserve Can Holder.

James Henry Winslow, Lynn, Mass.—This invention consists of a pair of rubber-lined clamping jaws, with the contrivance for opening and closing them and holding them closed; also, with clamp screws for detachably connecting the clamping jaws to a table or other support. The whole is contrived and adapted for holding glass fruit jars while screwing the covers on or off, and the holder is arranged so as to hold jars of different sizes.

Improved Carriage Spring.

William F. Dusenbury, New York city.—The wooden part of the side bar is made shorter than the space between the cross springs of the wagon, and to it is secured a steel spring, which is connected with the ends of the cross springs. A rubber block, through which the end of the spring passes, is placed in the hook of the cross spring. The ends of the springs and the rubber blocks are then secured to each other by a bolt. The rubber blocks prevent the springs from coming in contact with each other, and thus prevent wear and rattling.

Improved Bottle.

Lewis F. C. Schmidt, Pittsburgh, Pa.—In the packing of glass bottles for storage or transportation, whether they are filled or empty, it is essential that they be packed snug, and so that they cannot move about. To facilitate such packing, the bottle is made long and tapering from the bottom upward; and a heavy ring surrounds the bottle at or near the bottom of the neck, which outer surface of the ring is equal to the diameter of the body of the bottle.

Improved Drill for Drilling Metal.

John B. Shaw and Simeon H. Lucas, Chicago, Ill.—This improved drill for drilling holes in metals is so constructed that it may be used for forming a small and a large hole, that it will not clog, and will enable oil to be introduced to the point of the drill without being wasted upon the chips. In the opposite sides of the inner part of the drill are formed two grooves, the outer parts of the sides of which, for about half the depth of said grooves, are parallel with each other, and with the diameter that passes through their centers. The inner parts of the sides of the grooves incline toward each other and meet at an angle of about eighty degrees. This form of the grooves causes the chips to break in pieces, and thus prevents the drill from becoming choked. Other grooves conduct oil to the point.

Improved Cultivator.

Frederick W. Tolley, Coxsackie, N. Y.—Through the ends of the curved bars of the frame are passed rods, which are kept apart by tubular washers placed upon and interposed between the curved bars. The latter and washers are pressed together, making the whole frame firm and strong by nuts screwed upon the ends of the said rods. The draft hook is pivoted to the tongue a little in front of the forward rod. To the draft hook is pivoted a link which, when the cultivator is in working position, is hooked upon a hook placed upon the forward rod, and which, when the cultivator is in position for transposition, is hooked upon another hook attached to the tongue. The tongue is pivoted, and, with the frame, is adjustable in slotted guides.

Improved Bee Hive.

George H. Mobley, Nevada, Mo.—The bottom of the honey box is raised and is narrower than the box, to allow the bees to pass therein and up through suitable spaces.

Improved Car Stopper and Starter.

Absalom B. Sharp, Plaquemine, La.—The object of this invention is to utilize the power employed to stop a railway car by using the same to start the car. It consists in a rack which is made to mesh with a pinion upon the axle of the car wheel by means of a hand lever and crank shaft, the said rack being attached to a framework that compresses a spring to form the brake. The framework is provided with pawls which may be made to engage, through a second hand lever, with ratchet wheels upon the car wheels, and the said pawls are located upon the opposite side of the axle from the rack, so that, after the pawls are applied and the rack released from the pinion, the pressure of the spring is shifted to the opposite side of the car axle, and the car urged forward in the same direction in which it was going previous to applying the brake.

Improved Stereoscopic Print Cutter.

Thomas W. Smillie and Albert Siebert, Washington, D. C.—This invention relates to novel means for cutting, by machinery, stereoscopic pictures, which are taken in duplicate and require to be separated, trimmed, and reversed in position. It consists of two pairs of dies, intervaled and operated simultaneously by a treadle mechanism, together with holding springs, gages, and means of adjustment. It is found in practice to do its work rapidly, with great uniformity, and with but little labor to the operator.

Improved Gate Latch.

John L. Giessler, Clinton, Iowa.—This invention relates to an improvement upon the ordinary gate latch which is now so frequently opened by animals, and consists in so arranging two latches that both must be simultaneously operated in order to allow the gate to be opened.

Improved Car Coupling.

John Hardey, East Saginaw, Mich.—This consists of a drawhead which is provided with a suitably guided coupling pin, supported in raised position ready for coupling on a sliding plate operated by a slotted elbow lever, which is pivoted sidewise at suitable hight to the coupling pin, and acted upon by a band spring. The action of the link on the pivoted elbow drops the pin and couples the link, whose horizontal position for coupling is produced by end notches and shoulders of the elbow lever bearing thereon.

Improved Mechanism for Operating the Adjusting Screws of Rolls.

John Sharpless Worth, Coatesville, Pa.—This is an improved spanner, which may be readily reversed and adjusted to work both screws at a time or either singly.

Improved Apparatus for the Manufacture of Coke and Illuminating Gas.

John T. B. Bennett, Birmingham, England.—The ovens in which the coking is to be effected are arranged in connection with gas retorts, so that, by means of stop cocks and dampers or valves, communication between the said coke ovens and gas retorts may be opened and closed and controlled. Around the gas retorts is a channel through which the heated air and products of combustion from the coke ovens may be caused to circulate and heat the said gas retorts. During the first stage of the coking process, the heated air and products of combustion from the coke ovens are made to circulate around the exterior of and heat the gas retorts. When all are sufficiently heated, air is shut off from the said coke ovens. The heat of the coke ovens and their contents then causes the coking process to be continued, the volatile matters given off now being unburned in consequence of the exclusion of air. The volatilized matters are made to pass through the heated gas retorts, which are charged with gas-producing material, and thus are resolved into permanent illuminating gas, which mixes and passes off with the illuminating gas produced from the materials in the said gas retorts.

Improved Cork Sole for Shoes.

Charles Thackerey, New York city, assignor to Barrows & Boyd, same place.—The cork is secured in a die-cut box by some adhesive substance. The unbroken continuity of the box overcomes the objection to free ends—that they work loose—while, as a middle sole, it can be sewn by a machine with great facility.

Improved Cotton Seed Drill.

Henry Steckler, Jr., New Iberia, La.—This invention relates to an improvement in the class of cotton seed planters whose dropping wheel is operated by a bevel gear with a wheel which travels on the ground either in front or rear of the seed hopper. The dropping wheel is provided with a series of holes near its edge, and the wires inserted therein, and their ends projecting, to serve as teeth to draw the cotton seed out of the hopper.

Improved Filter Rack.

Moritz Leiner, New York city.—This is a rack to be placed in funnels for filtering liquids into bottles or other vessels. It is adjustable as to size, and is made in the form of a hollow inverted truncated cone, placed in an ordinary funnel, and used with filtering paper placed on the inner side, which leaves a space equal to the diameter of the wires of the rack between the paper and the inner side of the funnel for the escape of the air contained in the vessel.

Improved Washing Machine.

Thomas J. McWane, Versailles, Ill.—In this invention, the suds box is hung on trunnions and vibrated by means of a vertical lever attached to its side. The rubber does not vibrate, but is made vertically adjustable, to adapt it to rise and fall according to the thickness of the clothes which may be interposed between it and the suds box at any time during the operation of the machine.

Improved Spring Bed Bottom.

George L. Shepard, Columbus, Ohio.—Strips of metal form the top, made of spring material, and are bent down inside, so as to afford relief by straightening out to some extent whenever a section is sprung down. The invention consists, also, of a mode of connecting the strips so bent down within the volute springs by a ring laid in the bent down portions, and secured by cross pieces of wire passing over it and under the top coil of the spring, and fastened to the strips which pass over the top coil.

Improved Cut-Off for Shot Boxes.

Herman C. Wey, Hiawatha, Kan.—The discharge valve or cut-off is attached to a perforated hopper bottom, and consists of an outer guide casing with a spout, and an inner turning and sliding recessed tube, adjusted by a lug and guide slot to the open and closed position of the valves.

Improved Vine Rake.

Joseph W. Dunn, Corpus Christi, Tex.—This invention consists of a forward curved fork or double toothed rake, attached by eyebolt and braces to a common plow beam. The teeth pass under the vines and tear them loose from the ground, carrying them along until the rake becomes choked or full.

Improved Door Latch.

Jonas H. Crane, Schenectady, N. Y.—This door lock is constructed without the use of springs, and consists of a sliding bolt, which is operated by pivoted and horizontal toggle levers, in connection with a thumb lever acting thereon. The release of the thumb lever carries the toggle levers, by the action of the weight, instantly in a downward direction, and shoots the bolt forward.

Improved Automatic Fan.

Lorenzo D. Stamps, Galveston, Tex.—This consists of powerful clockwork mechanism, arranged in a bracket to be fastened to the ceiling and adapted to oscillate a vertically adjustable fan.