New Microscopic Telescope.

Mr. C. B. Boyle recently exhibited before the photographic section of the American Institute, in this city, a new optical instrument, which he called the microscopic telescope. It consisted of two parallel telescopes, about three feet in length and two inches in aperture, connected with hinges at the ends, and separated to the distance of the eyes by an adjusting screw. In order to produce the effect of the microscops, he places, before the object glass, prismatic lenses of about three feet focus, so that, when these lenses are in position, an object three feet in front of the object glass will be seen with both eves distinctly, and magnified according to the power of the eye piece.

CURIOUS FACTS ABOUT SPONGES.

With this instrument, although but lately completed, he has already made one curious discovery—that no matter how long a sponge may have been used, no matter how long it may have been kept dry, its life is apparently restored when it is wet. The sponge being wet with warm water and placed in a warm room, the extremities of the sponge, after a little while, appear to be alive, and reach out like so many snakes. The longer they are, the greater the motion. He had observed that wetting the sponge with salt water seemed to increase the motion. Nearly half of all the slender points seemed to come to life, but after they become dry the motion

He has put upon a sponge all sorts of dust, so that they should be under the same circumstances as the porce of the sponge, but nothing but the pores of the sponge appeared to be in motion. Under the instrument, the sponge has no longer the appearance of a sponge; it appears like caverns, rocks, etc. These moving parts, when caught with pliers, would pull out a portion of the sponge. When there is much water in the sponge, they seem to be satisfied, but it is as the sponge is drying gradually that they appear to have

The power of this instrument was forty-two diameters.

IMMENSE PHOTOGRAPHS.—There are now on exhibition in Paris says the Revue Industrielle, the two largest photographs which have been made since the introduction of the art. One of these photographs represents the principal façade of the new Opera, the other one of the bronzes—the Departure, by Rude of the Arc de Triomphe de l'Etoile. Each of the prints measures four feet three inches in length and three feet four inches in hight. They were obtained in one single piece, by well known processes, and with the aid of a large and specially constructed camera.

DECISIONS OF THE PATENT OFFICE.

BEFORE THE BOARD OF EXAMINERS-IN-CHIEF. PRESENT: MAROUS S, HOPKINS R. L. B. CLAR C.C., CONCURRING.—APPLICATION OF MILLER T. GREENLEAJ AND GEORGE Q. JADAMS FOR A PATENT FOR A CAR COUPLING.

BEFORETHE BOARDOF EXAMINERS-IN-CHIEF, PRESENT: MAROUSS, HOPKINS.

R. L. B. GLUR C., CONCURRING.—APPLICATION OF MILLERT. GREENLEAY
AND GEORGE Q. ADAMS FOR A PATENT FOR A CAR COUPLING.

In this case the Examiner admits: that the patents of England and Thompson do not preent the structure claimed. They do not show the transverse like stop, and sire, therefore, not in point. The rejected cases of Jones and Millory, however, completely answer the claim presented and in the case of Millory this is admitted by the applicant in argument. But the point is made that a rejected and abandoned applicant in argument. But the point is made that a rejected and abandoned applicant in argument. But the point is made, and the issue it raises is not to be avoided by this effice.

The Supreme Court of the United States, in the case of Brown is. Sebby (O. G., Vol. 6, No. 12) held that "the mere fact of having unsuccessfully applied for a patent. It had been rejected, withdrawn, and never renewed. After discussing evidence introduced with respect to the making and using of a methine by the rejected applicant, which machine was held to have been an experimental one, the court said: "Were it not for the application for a patent, it (the machine) was held to have been an experimental one, the court said: "Were it not for the application for a patent, it (the machine) was made, and afterwards voluntarily withdrawn, make any difference? We think not." Thus it appears the Suprema Court rave no weight whatever to a mere rejected and abandoned application, in the absence of independent proof sufficient to defeat the patent in question. The force of the application as proof of prior invention was one of the issues before them, and they decided if ediniety.

In the case of the Northwestern Fire Extinguisher Company vs. the Philadelphia Fire Extinguisher Company (O. G. Vol. 6, No. 2), a rejected application which had not been withdrawn or formally abandoned, but which was probably an abundoned application by operation of the S3d and 35th sectio

in prior to the fing of the refected application, that application and the drawings with it were admitted as evidence tending to explain the invention.

The language of the court was that rejected applications "lack the essential quality of a publication, in that they were not designed for general circulation, nor were they made accessible to the public generally. They were placed in the custody of the Commissioner of Patents, not that they might hereby become known to the public, but for the special purpose of being examined and passed upon by him.

"Although they might incidentally become known to any one whose reserrchesin the Patent Office might disclose their existence, they are not, the first the properties of the public, but for the special purpose of being examined and passed upon by him.

"Although they might incidentally become known to any one whose reserrchesin the Patent Office might disclose their existence, they are not, the first the properties of the public, and they existell the properties of foreign and the properties of the public, and they existell the properties of foreign and the continues of the patent laws. It is said they existelled that a written description of a machine, although illustrated by drivings, which has not been given to the public, does not constitute an invention within the meaning of the patent laws. It may be so full and precise as to enable any one skilled in the art to which it appertains to construct the machine described; but until it has been embodied in a form capable of useful operation, it has not attained the proportions or the character of a complete invention. However suggestive and valuable it may be as an untried theory, it is ineffective against the practical and useful product of inventives kill."

In the case of the Lyman Ventilating and Refrigerator Company 2s. Taylor (O. G. VO. 6. No. 2), the above decision was cited with approval, and the court held that an alleged invention, as exhibited in a rejected application of the court and accessible to the v

secondarily works me abandonment of the alieped invention it purports to cast in a not sufficient, in the absence of any other evidence, is establish the cast in a not sufficient, in the absence of any other evidence, is establish the official of the purpose of the control of

Recent American and Loreign Latents.

Improved Fastening for Railroad Rails.

John L. Stewart, Ellicott city, Md.—The object of this invention is to provide a fastening for railroad rails, in which the use of the ordinary spikes is dispensed with, and the devices so constructed that, the greater the pressure upon the rails, the tighter they are clamped. It consists in a grooved base plate attached to the ties and containing sliding boxes, which boxes are held in place by keys engaging with undercut ledges in the said base plate. The said boxes contain pivoted hooks having a horizontal groove in the lower part, in which rests a bearing plate which supports the rail. Beneath said bearing plate is a cushion of rubber, so arranged that, when compressed by the bearing plate from the weight of the train on the rail, the hooks are made to clamp the rail more tightly.

Improved Machine for Making Fence Pickets.

Isaac Levy, Ellaville, Fla.-The invention is an improvement in the class of machines wherein revolving and vertically adjustable cutter heads are employed for dressing the heads of the pickets The improvement relates particularly to the construction of the sliding or reciprocating table and an attachment thereof, for supporting and clamping pickets of different lengths.

Improved Door Mat.

Orrin Rice, Adrian, Ill -The sheet metal plate is perforated with holes, and the tufts of corn husks are inserted through them, one end of each tuft being drawn through one of a pair of holes, and the other end through the contiguous hole, so that the free end portions of the tuft will project on the opposite or face side of the plate, and the middle portion will project on the back of the plate. The ends of the several tufts are then cut to a uniform length, and the mat is complete.

Improved Cherry Pitter.

William B. Knapp, Tecumseh, Mich., assignor to himself and Frank Bumann, of same place.-This cherry pitter is formed of a tube, open at both ends, having a knob placed at one end, and teeth formed upon its other end. The cherry is pressed against the toothed end of the tube, which causes the pit to drop through the tube into a receiver, leaving the cherry whole and ready for use.

Improved Handle for Child's Carriage.

Charles F. Lauer, Pittsburgh, Pa.—This is a metal handle for children's carriages, having a concave T-shaped piece for attaching it to the wood frame by which the carriage is propelled. The T piece is so contrived that it applies to the cross piece and one of the shafts at their junction, and also serves to re-enforce and strengthen them, besides attaching the handle, thus uniting two pieces in one, and saving labor and material in the making.

Improved Atomizer.

Charles E. Robinson, Brooklyn, N. Y.-This invention relates to certain improvements in burners or atomizers for oil-burning furnaces. It consists in the combination of a tubular valve, a stem valve contained inside the tubular valve, and a valve seat, so constructed and arranged that the jets of steam and combustible liquid issuing therefrom form two hollow cones intersecting and inverted with respect to each other, so as to insure the thorough mixture of the two elements. The invention further consists in the combination with the said valves and valve stems of their respective feed pipes, and also in the adjustment of the valves.

Improved Oil-Burning Apparatus.

Charles E. Robinson, Brooklyn, N. Y.-The object of this invention is to provide a means for supplying petroleum or other liquid hydro-carbon to oil-burning furnaces. It consists in a large supply tank provided with a steam heating coil, a feed pipe extending below the surface of the oil, and a pipe for admitting direct steam pressure upon the oil for forcing it out, in combination with an oil reservoir communicating therewith by means of a valve, and provided with a level gage and inlet pipes for the oil and steam.

Improved Book of Letter Sheets.

Henry S. Jackson, New York city.—The object of this invention is to provide convenient means for leaving memorandum in the absence of persons called upon, and for preventing trouble and delay in writing notes on various occasions; and it consists in a book having the leaves gummed for sealing, with perforations across the eaves to allow each leaf to be easily torn off.

Improved Lamp Burner.

James Curzon, Darien, Conn.-This is a burner of two wicks, have ing the wick tubes bent longitudinally, either their upper parts or throughout their entire length, and so arranged as to form a star or similar shaped light.

Improved Bed Pipes for Lead-Corroding Houses

Peter H. Decker, Morsston, N. Y.-This invention has for its obect to furnish ventilating or bed pipes for causing a uniform circulation and the same degree of heat through all the corroding pots of all the tiers of the stack. The invention consists in pipes made tapering and provided with blocks in the interior of their lower parts, with holes in the lower and upper parts of their sides, and with caps at their upper ends. By this construction the passage of the vapors from the lower to the upper pipes induces a draft from each tier of pots.

Improved Fire Box Attachment to Steam Boilers.

John Lee, Hazleton, Pa.-The object is to protect the rivet joint from the direct impingement of heat, so as to avoid the weakening of the seam joint without diminishing the fire surface. This is done by a seamless hollow casting, having projecting tubes which may be forced through and held tightly in holes of the boiler, while they may be readily removed by driving a punch passed through the outer holes. The latter may be stopped by detachable plugs.

Improved Thread-Winding Guide.

Eugene L. Manchester and John A. Bolen, Springfield, Mass.-This relates to the thread-winding guide used in thread mills for guiding the thread and laying it on the spools. It consists of a wheel in that part of the guide which is employed for laying and compacting the thread on the spool. The object is to substitute rolling for sliding friction, and thereby economize in the cost of guides by largely leasening the wear.

Improved Ruffler.

James McCullough, Aspinwall, Neb.-The essential feature of this invention consists of the ruilling pawl or plate, mounted so as to work on a pivot, and connected to the bell crank, by which it is worked in such manner that the friction due to sliding in ways is avoided. It is so actuated that, in pushing the cloth forward, it presses harder as the resistance increases, and in drawing back it rises off the cloth and moves back easily; and it also acts as a guide to control the cloth and prevent the ruffle from working laterally out of the ruffler.

Improved Self-Closing Hatchway,

Samuel Lawrence, New York city.—The covers of the several floors are connected. To the upper covers are attached cords which are secured to counterpoised levers. This construction throws the levers back when the covers are raised, so that they will be out of the way of the carriage. To the inner ends of the levers are attached cords, which join a single cord which passes down along the side of the hoisting rope, and its lower end is attached to the carriage. To the cord, at suitable distances apart, are attached rings, through which the hoisting rope passes, so that, when the carriage is raised the cord may gather in loops. By this construction, as the carriage is raised, the weights raise the covers, so that the carriage does not come in contact with said covers. As the carriage in its descent approaches the bottom of the well hole, its weight tightens the cords, draws down the levers, and raises the weights, allowing the covers to close gradually by their own weight.

Improved Bottle Stopper.

Charles De Quillfeldt, New York city. - A stopper-carrying yoke is pivoted at some distance from the ends of a wire lever frame, swinging in eyes of a wire band attached to the neck of the bottle. The elastic stopper is made with disk-shaped base and cylindrical shank, perforated for the passage of the yoke, and is tightly secured to the bottle by a sleeve-shaped and flanged cap piece. The closing of the stopper is performed by guiding the base part into position on the mouth, and swinging the lever frame down.

Improved Sewing Machine Caster.

John H. Plank, Bloomfield, Iowa.—This invention consists in combining a lever with the socket plates which receive the feet of the sewing machine legs. Said lever is pivoted and otherwise so arranged that, by a movement thereof, the casters of one end of the socket may be lifted off the floor and the support of the machine transferred to the legs, to hold the machine firmly against shifting about while being used.