

AMERICAN INDUSTRIES.—No. 68.

PROPRIETARY SPECIALTIES.

While the production of that class of articles known as proprietary specialties may involve no machinery or processes not in common use by all manufacturers of drugs, chemicals, and the like, the business of advertising and selling them in a large and successful way does involve industrial operations of such magnitude and completeness of organization as to bring the business fairly within the scope of great industries. And since the business methods developed in creating and supplying a world-wide market for a proprietary specialty are in a large measure applicable to the work of making known any article of manufacture the general use of which is desired, a study of the operations of a representative house in this branch of trade must have at least a suggestive value to all manufacturers whose products are capable of winning general acceptance if properly placed before the public. The accompanying illustrations exhibit the principal departments of the business of Messrs. A. Vogeler & Co., Baltimore, Md., one of the largest manufacturers of proprietary specialties in the country. The offices and works of the firm are situated on West Lombard street (Nos. 184 and 186), and run back the distance of a long business block to a shipping street in the rear. The main building has a front of fifty feet, is four stories high above ground, and is constructed of pressed brick with Ohio stone trimmings. In the front part of the ground floor is a suite of admirably appointed offices, beautifully fitted up and handsomely furnished. The reception parlor is especially noticeable for the richness of its furnishings and its perfection of comfort.

Along the front hall are grouped the offices of the managing partner, his private secretary, and the cashier, separated from the other departments on the same floor



by a plate glass partition. On the further side of this partition is the literary department, to which the corps of translators, and the staff of correspondents and reporters throughout the world, submit their work for revision and approval, and where the advertisements and other work pertaining to the department are prepared. The offices of this department contain a comprehensive and carefully selected library of books and periodicals, and in all their appointments would do credit to any publishing house. On the same floor is the mailing supply department, where a corps of lady assistants make ready for the mails the vast correspondence of the house, circulars, documents, and the like. The shipping department, bindery, box factory, frame and show card factory, etc., are in the rear building, which is three-fourths the size of the main structure; also a large fireproof storage vault for chemicals and an extra laboratory.

The main laboratory is on the fourth floor of the front building, connected with the extra laboratory by a bridge or corridor. Here, as shown in our illustration, are the retorts, stills, and condensers, percolators and funnels, stock and distributing cans, and other appointments of a well-ordered laboratory, with ample facilities for the swift and easy handling of crude products and completed preparations, particularly the St. Jacobs Oil, which is the chief specialty of Messrs.

Vogeler & Co. The employes of the laboratory are under the training and supervision of a skillful chemist, who assays every constituent of the Oil to insure uniformity in the product. The finished Oil, after the final filtering, is run into large supply cans, whence it is drawn into patent bottling machines in its passage to the bottling and labeling department.



The distinguishing feature of the house, however, and the one in which it takes great pride, is the advertising department, the administration of which is a vast business by itself. This department occupies the second floor of the main building. Approaching this floor by an ample stairway from the front one passes through a wide hall, from which, at right angles, a narrower hall leads to the manager's office. This office, like those on the main floor, is one of a communicating series, and is well equipped and comfortably furnished as to decoration and fitting, the floor being covered with Brussels carpet and the walls with pictures. Adjoining are the offices of the stenographic reporters, corresponding clerks, and bookkeepers, all perfectly appointed. Separated from the offices by a handsome walnut and ground glass partition is a spacious room, 90 by 50 feet, which is devoted to the filing and control of newspapers. This room contains 10,000 pigeon-holes, each one having over the top a small sliding sign, upon which is printed the name of the paper for which it is intended. Every paper in which the advertisements of this house appear comes regularly to this department, and is carefully examined, marked, entered, and filed. A corps of lady clerks are engaged in this special service, under the supervision of a gentleman of long experience in such matters. All derelictions on the part of advertising papers are reported to the manager, who at once presents his complaint to the paper in fault.

The unvarying courtesy exhibited toward publishers, and the exceptional method of paying advertising bills without waiting for the rendering of statements, have established the most cordial relations between the press and the house. No house could be more strict and exacting in its demands, and surely none is more prompt in fulfilling its obligations.

The system of book-keeping, carrying on correspondence and conducting newspaper advertising which obtains here, is original in conception and execution. Of the many thousands of letters and documents always on file, any one of them, whether unimportant or otherwise, can be instantly referred to, considered, and returned to its proper place. A daily and weekly permanent account is kept with every paper in which the advertisements of the house appear, and at a

single glance the exact state of the work is comprehended. This system involves the maintenance of a set of large books—22 in number—containing over 12,000 accounts, for the preservation of which a safe specially constructed is provided. Every letter and every contract is dictated to stenographic correspondents by the manager, and thus the vast amount of correspondence is practically under the control of a single head. The house points with especial pride to the expressed opinions of reliable advertising experts that its advertising department has not its equal anywhere. As an evidence, we cite from the *Chicago Inter-Ocean* on this point. "In its magnitude, conception, system, and originality it is vastly superior to anything of the kind in America. Any one familiar with this kind of business can understand the vast amount of detail in such a department, and only such can appreciate the tact and business ability that systematized and organized it so perfectly."

Every possible convenience to facilitate business is here seen. Speaking tubes, dumb waiters for communicating with the various other departments, libraries of reference, safes for the preservation of valuable documents and books, and other conveniences are provided.

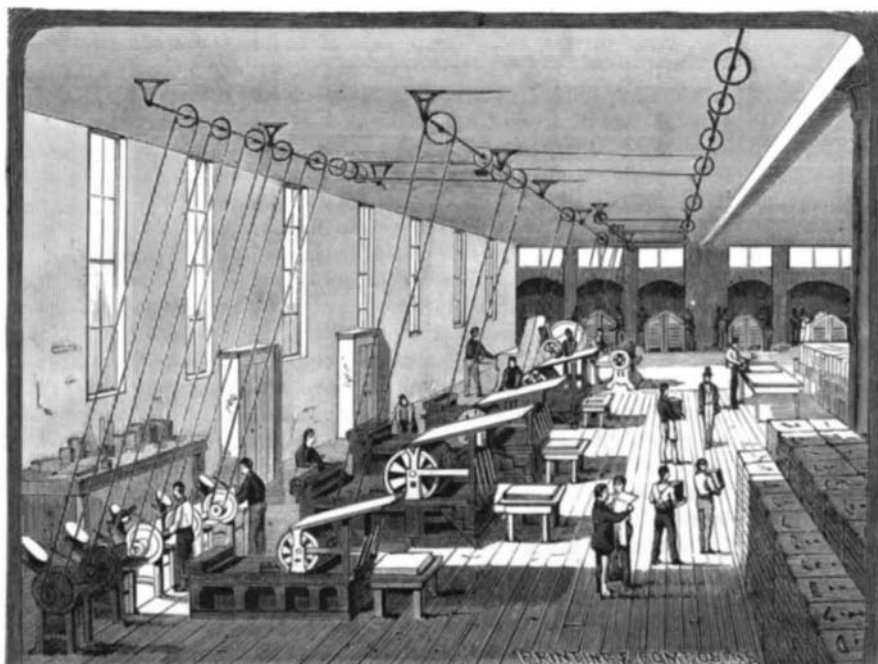
The bottling and labeling department is situated in the main building, and is noticeable chiefly for the swift and very expeditious manner in which the product is prepared for the dealer after leaving the hands of the compounders. Connected with the main supply cans in the laboratory by tin lined pipes, are ball-faucet boxes with adjustable automatic stop cocks governing the flow of the liquid through which the oil runs into patent bottle filling machines. One attendant to each machine is kept constantly busy in removing the bottles as they become filled.

The bottles come to the filling room from the factory ready for immediate use. After they have been filled as described,



they are removed in large trays to the corking tables, where they are securely corked and passed on to the long labeling tables. Here young ladies deftly handle the bottles, applying to each the regular label, wrap round it a circular of directions in eleven languages, and put on it an attractive lithographed wrapper. The finished bottles, in immense heaps, are then carried along to the packing tables and placed in machine-made wooden boxes, one dozen bottles in each box, and these boxes are then packed in a stout wooden case, each containing six of the smaller boxes or one-half a gross of the article ready for shipment.

One of the most interesting features of the whole establishment is the printing department. It is in the basement of the main structure, and is well appointed in every respect and admirably ventilated. Windows admit the light from three sides, and the apartment is wainscoted in solid wood. Here the printing of the house is done, for which purpose thirteen steam presses are kept running day and night, printing labels, posters, medical almanacs, and advertising work of every description, including a very considerable amount of "color" work, etc., all of which is "set up" by their own compositors. This advertising matter is furnished to patrons in eleven different languages. In this department also, are steam binding, stitching, cutting, and book



SCIENTIFIC AMERICAN

[Entered at the Post Office of New York, N. Y., as Second Class Matter.]

A WEEKLY JOURNAL OF PRACTICAL INFORMATION. ART. SCIENCE, MECHANICS, CHEMISTRY AND MANUFACTURES.

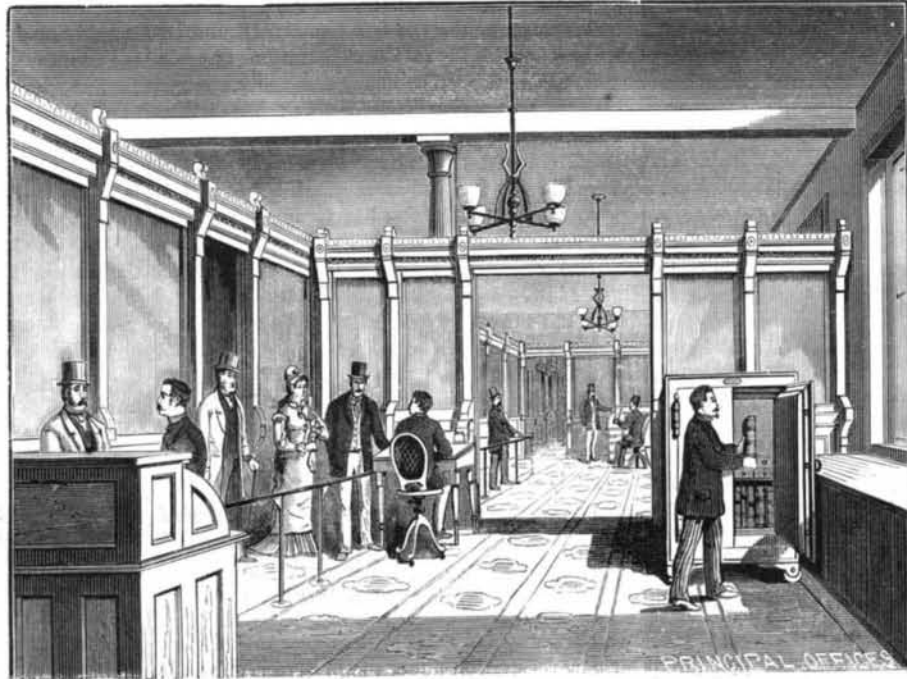
Vol. XLIV.—No. 13.
[NEW SERIES.]

NEW YORK, MARCH 26, 1881.

[\$3.20 per Annum.
[POSTAGE PREPAID.]



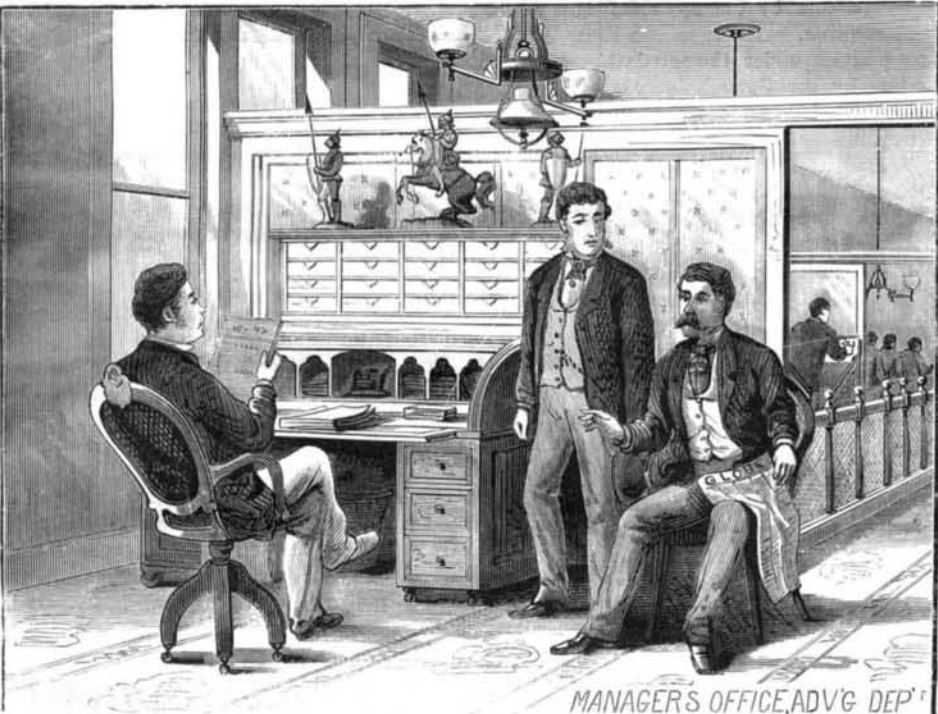
OFFICE & WAREROOMS



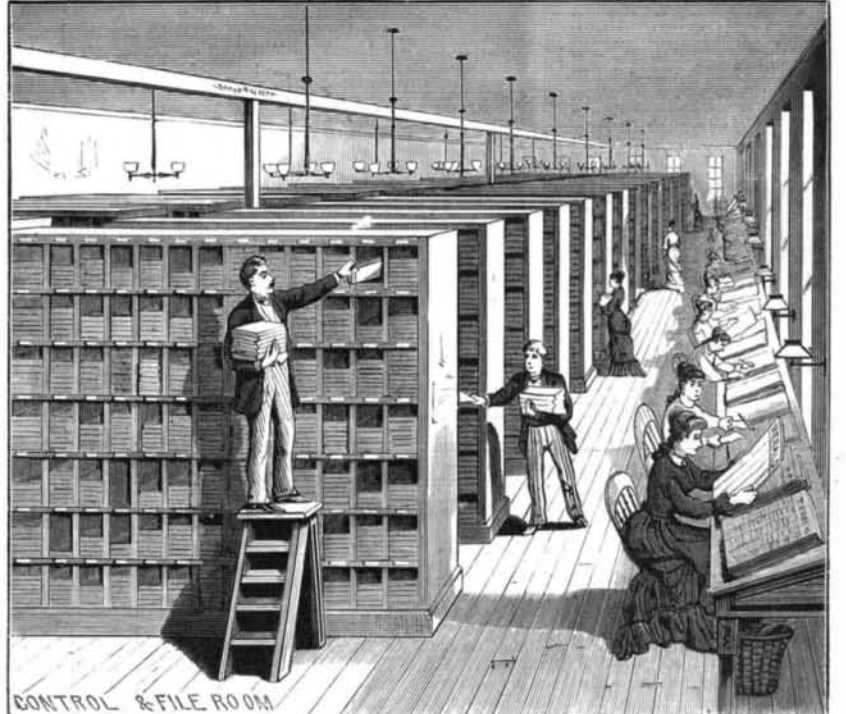
PRINCIPAL OFFICES



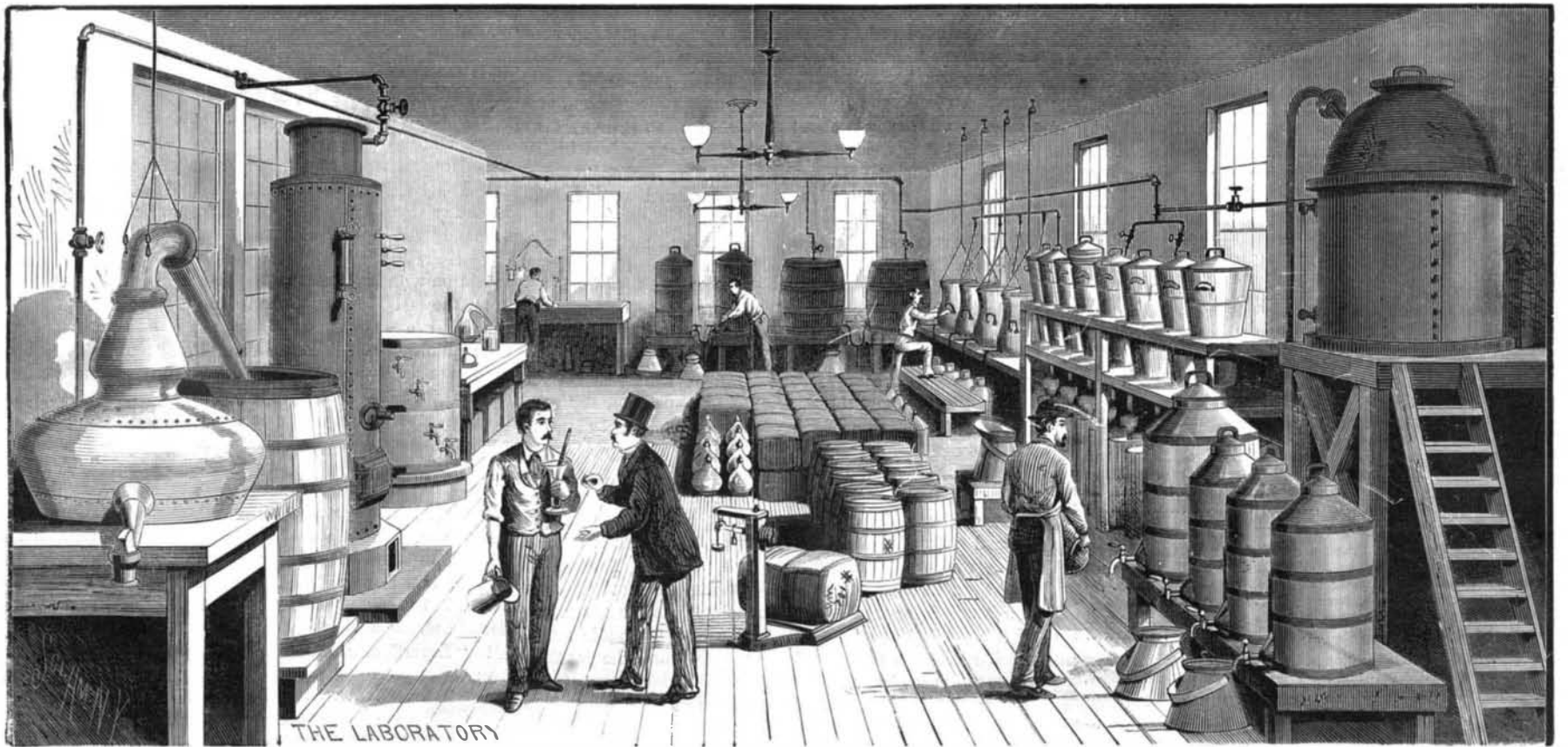
MANUFACTORY NO. 2



MANAGER'S OFFICE, ADV'G DEPT.



CONTROL & FILE ROOM



THE LABORATORY

PROPRIETARY SPECIALTIES—A VOGELER & CO. BALTIMORE MD —[See page 194.]

trimming machines, driven by a fifty-five horse power engine manufactured expressly for the firm. The boiler is located under the rear pavement, remote from the press room, thus preventing the heat and dust from entering the department. The same exact methods and system are observed in the working of this branch of the establishment as in every other. The bindery is located in the rear building or annex. Here the pamphlets, almanacs, etc., are stitched and covered, giving employment to a large number of young women, whose skill and swiftness in their work are admirable to witness.

The show card department occupies two floors of the rear building. Framed chromo-lithographic show cards and other work of a similar nature are turned out here in immense quantities. The moulding is bought in the rough, and then smoothed, polished, and finished, plain, in gilt, or in colors, as ordered. It is then cut into proper lengths by suitable machinery, mitered, and joined, and made ready for the reception of the lithographed cards and other devices for framing. These cards, as received from the printing department and chromo printers, are stretched, sized, varnished, and mounted, and then are passed to the packing department, where they are boxed, an abbreviated description being stenciled upon the package. Thence they go to the shipping department for address and shipment.

It might appear upon cursory thought that a business of so much detail, and separated by necessity into so many departments, each distinct in its nature and methods from all the others, would unavoidably run into confusion at some points, but such is not the case in this concern. While each department is responsible to its particular head for its running and results, the several heads or chiefs are responsible in return directly to the managing partner of the house, so that, though the operations of the house extend nearly over the whole world, the vast business is carried on with the utmost smoothness and regularity.

NEW SWINGING GATE.

A simple and very effective automatic gate is represented in the annexed engraving. It presents none of the objectionable features found in the class of gates operated from overhead, and has but few parts, all of which are substantial and durable.

Fig. 1 shows the gate in perspective, the horizontal connecting rods being exposed to show the connection of the various parts. Fig. 2 is a side elevation of the upper gate hinge, and Fig. 3 is a plan view of the same. Fig. 4 shows the latch used in connection with the automatic gate. This gate can be made of wood or iron, or of both materials combined, and it may be of any style to correspond in general design with the fence to which it is applied.

The gate is supported at the top by a bracket, A, attached to the stile and apertured to receive the pintle of the bar, B, the latter having a heart-shaped opening for receiving the pintle of the bracket, C. The bar, B, is rigidly attached to the upper end of vertical rod, D, which is offset to bring its lower portion axially in line with the pintle of the bracket, C. The rod, D, is journaled near its lower end in a bracket secured to the bottom of the post, and carries a horizontal stud upon which rests the portion of the hinge attached to the lower part of the gate. This part of the hinge is forked to embrace the rod, D, and bent downward forming inclined planes, and when the rod is turned the horizontal pin passes under one or the other of the inclines. This combination assists in opening or closing the gate, as will presently be described. The trip rods, E, consist of iron or steel rods bent so as to form two cranks at right angles to each other, and one end of each rod has a lever arm connected by a horizontal rod with a T-lever secured to the bottom of the vertical rod, D. The horizontal connecting rods are made adjustable as to length to compensate for any accidental change in the position of the trip rod.

This gate is readily operated by a light carriage containing one person,

and its action is quick and sure. The operation of the gate is as follows: The vehicle wheels operate, through the trip rods, E, and the connecting rods to turn the vertical rod, D, in the usual manner of such gates. It is well understood by those familiar with such devices that the vehicle

on its pivot, so that the pivot occupies one of the sides of the heart-shaped orifice instead of its apex, and the bar is thus made to move rearwardly a sufficient distance so that its point will engage with the catch formed on the bracket, C, and is thereby held in position until the gate swings into position, when it draws the bar forward and the pivot resumes its place in the apex of the heart-shaped opening.

The horizontal stud in the rod, D, turns around under the inclined portion of the lower hinge, so that its face, which rests upon the stud, has a tendency to slide upon the stud, and thus accelerate the motion of the gate, or enable the same to be operated when tilted to a less angle than would otherwise be necessary.

The gate latch is lifted out of its notch when the free end of the gate is raised by the tilting mechanism, so that it offers no impediment to the opening of the gate by a passing carriage.

A double gate may be made on this plan by simply adding another arm to the lever at the bottom of the rod, D, and connecting it by a rod to a corresponding arm of a

similar mechanism on the second gate.

This gate was recently patented by Mr. Nathan H. Long, of Muncie, Indiana.

MISCELLANEOUS INVENTIONS.

Mr. William Dewart, of Fenelon Falls, Ontario, Canada, has patented an improvement in ventilating houses, by which purer outside air than that immediately contiguous to buildings is supplied to interiors. He passes the air through a conservatory, in which the plants purify the air, using a pipe with an outside flaring end for introducing the air to the plants, and pumping the air so purified into the building to be ventilated.

Mr. Harrison Owens, of Fort Worth, Texas, has patented a coffee roaster, which can be used in the oven of an ordinary stove, and which retains the aroma of the coffee. The coffee is roasted in a revolving cylinder provided with a hollow trunnion and a semi-tubular tester introduced through the trunnion, which tester serves as a handle for revolving the cylinder, and can be withdrawn with sample to determine the progress of the roasting.

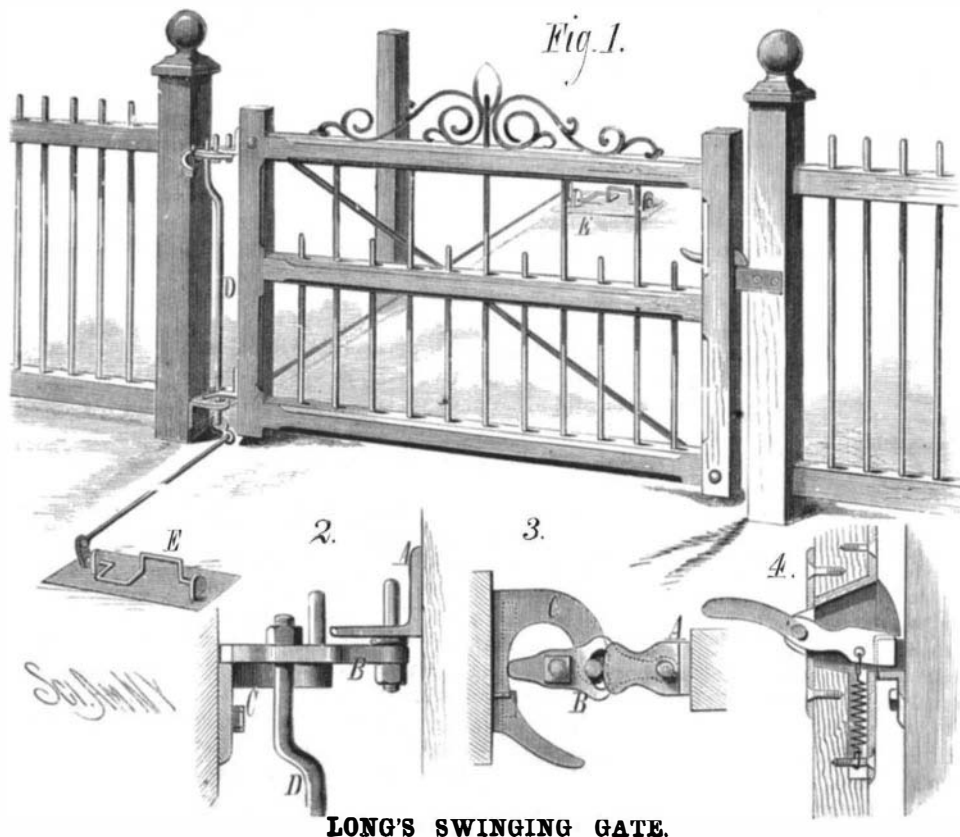
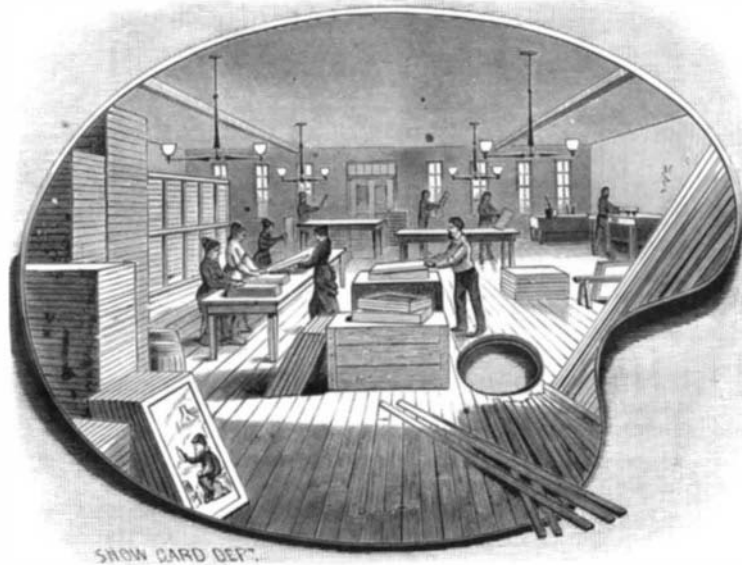
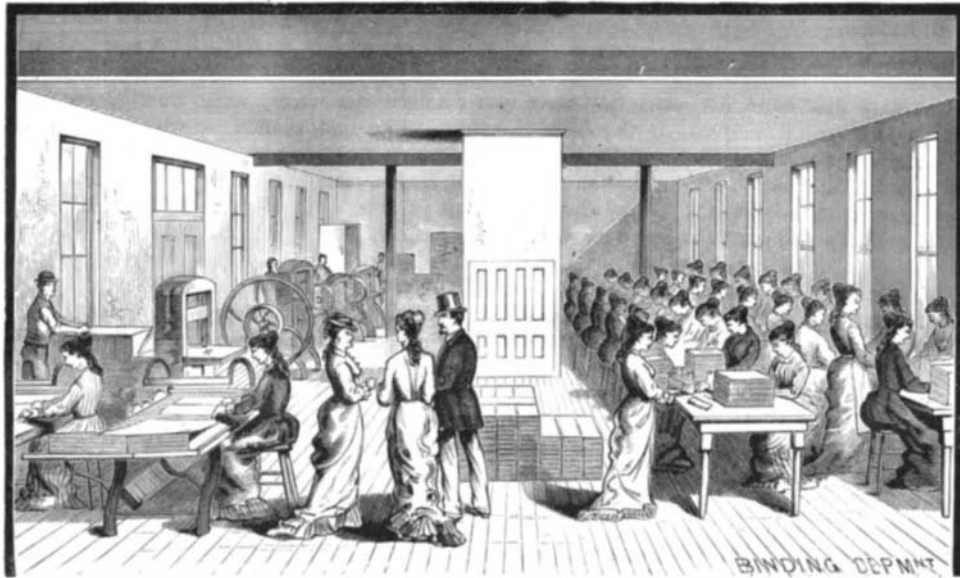
Mr. Francis A. Dupuy, of Ironton, Ohio, has patented a leather blacking frame, which enables the flesh side of the leather to be kept clean, and saves the time usually expended in wiping the table commonly used. It is a rectangular frame with cross pieces and longitudinal

wires tightened over the crosspieces by a taking-up device. Mr. Charles F. Stillman, of Plainfield, N. J., has patented a trotting sulky in which the frame, axle, and shafts are so constructed and arranged as to afford more room for the rear part of the horse and permit the animal to be hitched nearer to the axis of the wheels than has heretofore been possible, thus avoiding interference with his gait and obtaining greater ease of draught.

Mr. William B. Runyan, of Pensacola, Fla., has patented a timber crib designed to prevent loss from the breaking asunder of timber rafts. It is a rectangular crib or cage composed of timbers securely fastened together, and a series of cross-clamps, with screws and nuts for holding the confined timber in place, one end of the crib being hinged, so that it may be opened for loading and unloading, the hinged end being provided with a roller to facilitate the moving of the timber. Both ends of the crib may be hinged when three lengths of lumber are desired to be loaded.

Mr. James A. McCaffrey, of Philadelphia, Pa., has patented an ice sandal. The sole is of wood, leather, or rubber, etc., perforated with numerous small holes. The objection to metal spikes is thus avoided. The sandal can be worn over other foot gear.

Mr. Frank S. Osborn, of Bolivar, N. Y., has patented a horse poke. An adjustable sectional collar is held in place upon the horse by suitable bands or straps, and has a forward and upward projecting pivoted bar or stale whose butt rests on a sharp-pointed spring, which pierces the horse's breast when the free end of the stale is pressed downward as the horse attempts to get over a fence.



LONG'S SWINGING GATE.