Scientific American.



[Reported Officially forthe Scientific American.] LIST OF PATENT CLAIMS Issued from the United States Patent Office FOR THE WEEK ENDING MAY 20, 1856.

CUTTING MEAT—G. V. Brecht, of St. Louis, Mo. I do not claim to be the myentor or a meat cutter.

But a claim the roller, as constructed, of a series of circular plates, having teeth or hook, on their peripheries, when, said plates are put on a twisted square shaft, thus haaking rows of teel, hor the edges of the several plates, and by the twist of the shaft, giving them a spiral form.

WATER CLOSETS—Edward Bookhout and Chas. Hew lett, of New York City: We do not claim a movable bowl, for a movable bowl is used in what is termed the

town, for a movietie town, and saying urman.

Assinger do we claim the pan for the pan has long been in u.e. in wint is known as the pan coset (the bowl is statib, ary); the pan is also an old device.

Lut we claim, first, a bowl having the forward and lackward inotions, by means of the said bowl and waste working on a shall, or arms, or their equivalent, substan-

Second, we claim the use of the pan in combination with a movable towl, as set forth.

cann the described boal framer, as composed of the sets of adjustance and extension bars, a bc de f, and connecting contrivances, viz., the keel rests, m m, bars, n o, and their screws, substantially asset forth, the whole being arranged together, essentially in manner and for the object or purpose as specified.

PILL M SCHINES-H. E. Chapman, of Albany, N. Y. I can in the feeding cylinder, O. the knife, K, the grooved beet piece, N, and the two grooved cylinders, B. B, having their strates of year at different rates of speed, all substantially as described, for the purposes set forth.

standary as dearried, for the purposes set forth.

Fire Arms—Samuel Cott, of Hartford, Conn. Patented in Anglant, March 18, 1853: 1 do not claim the method of retaing the many chambered breech in frequency, by a driving plus or but operated by the cock or some part of the lock moving in unison with the cock, and shaing in a sale, so green es cut in the periphery of the totaling breech, or some part connected with it, which groves are so formed that in the act of rating the driving into the body of the continuous properties of the continuous properties. The particular chamber in the better, and in the act of cocking, pass into and applied another and diagonal grove, so formed as to rotate the barret, and in the act of cocking, pass into and applied another and diagonal grove, so formed as to rotate the barret and diagonal grove, so formed as to rotate the breech in line with the tarret preparatory to another cases age, a miss method has long been known, and I have also estated my invention consists in or relates to certain improvements which i have made there.

in claim combining with the driving pin or bolt and with the series of diagonal and longitudinal grooves for roading the treech and holding each chanter in line during the discharge, substantiary as described, the series of short to-gradinal grooves for locking the rotating freech, so that the manimer can rest on the solid metal between two chambers instead of the mpple, substantially as described, to prevent accidental discharges.

And these calling in combination with the said driving pin of both, and the series of long longitudinal and diagonal grooves, the atteral grooves of inclin deplares, substantially as described, to admit of turning the breech by hand when the hammer is a thalf cock, as set forth.

VALVES FOR Hint PRESSURE STEAM ENGINES.— Richard Colburn and L. W. Hanson, of Norwich, Conn. we cann the semactic valves, K. K. connected togethe state or I. for the purpose of reeing the cytinder of wat rand of cacks.eam, in the manner substantially as de

PRINTING MACHINE—J. H. Cooper, of Philadelphia, Pa.: I am aware that a type wheel, having upon it vertical type, and moving to the paper to give the impression, has been used, this id not carin.

I cannot in combina ion with a type wheel having its type, radiancy art anged thereon, and operated as described, the presser bar, 0, for carrying the paper to the type of receive the impression, abstantially as described.

I asso cannot be manner of connecting and disconnecting the paper to the type of the type of the points, in the particular of the interest of the points, in the twices, r. brace, M. and its projecting piece, r. so that the leaf may run in one commuons direction, whilst the paper carriags may be traversed back and forth, substantially as described.

Annealing Furnace...J. J. Eagleton, of New York City: I cann churging and discharging an annealing furnace in cours, by means described, and substantially in the manner and for the purposos specified.

SAW MILL BLOCKS—Bela Gardner, of Florence, Mass. I cra.moperating or adjusting the tooks of saw mill carriages by means of the screw, F, endiess chain. J, and sanat. L, in connection with the pinnons, cr M, and clutches, it N, arranged substantialty as shown and described

CENTER TABLE-W. O. George, of Richmond, Va.: I CENTER TABLE—W. O. George, of Richmond, Va., I chaim the said table, called the oracular wheel or unique center table, in combination with the game called "equality," together with the checks: the said table game and checks saing miny described and shown; with the exception that id a not claim those parts which, as taken, are well known, and these which are common to the usual round center table.

of do I claim that checks are new and of my own in-

nature their application in this particular way, and for particular purpose, and the method or arrangement this particular purpose, and the method or arrangement of them, Li communation with the table and game, by which particular effects are produced, or certain results a rived and, substantially as represented and set forth.

ARTIFICIAL DECOLORING COMPOUNDS—I rancis Gerau, of New York City: I claim the use of phosphate of the, precipitated out of a solution in muriate acid as an Ingrecient in a compound of materials for the manufacture of a decolorating coar which other materials may be varied according to circumstances

Swing Bolt for Fastening Shutters-John Gun nee, A. and hub.c. constructed and operating as described in connection with the carch plate, b, when the same is cast with the crannier, b, the whole being employed in the mainner and for the purpose settorth.

GAS RETORT FASTENINGS-John G. Hock, of New N. d.: 1.c.a. the attachment of the tail to the retor of other mount, by means of the hook headed holts, if it, constructed and applied, and operating substantially as described.

SHING: E MACHINE—Edward Hedley, of Shelby, N. Y. I claim the formation and invention of the endless feeding sed of bevered slots, so as to give the required taper to the singing, as it passes tenearm the knives of the revolving class, substantially as set 1 orth.

Horse Shok-John Henderson, of Elmira, N. Y.: I claum arransing a special learing surface adapted to the rim of the hoot, and terminating in lines converging from the outer title inner edge extensive, upon the bars, c.c., with a g admit denection of the heel, beginning at the converging lines, A. A., and extending to the rear parts of the slice will be asset forth.

FEATHERING PADDLE WHEELS—Harvey Lull, of Hotoken, N. J.; I claim imparting to the paddles of paddle
wheels a rotary motion on their axis, substantially such
as described, whist revolving about the axis of the paddic wheel, by means of an excentric cog wheel combined
with and engaging the cogs of the pinions on the shafts of
the paddless, the form of which pinions is generated as
specified, for the purpose set forth.

TELEGRAPHS—D. E. Hughes, of Louisville, Ky.: I do not claim any feature of any existing printing or marking telegraph, as any part of my invention; nor do I desire to interfere in the least with any heretofore invented. Conceiving that I have made important improvements intel-egraphs, I desire protection only for that which is novel and of my own invention.

I claim, first, the holding in place of the attractive

po wer of electro or natural magnetism, as applied to the telegraphic purposes, whether the same be applied in the manner described, or in any similar manner, producing

manner described, or in any similar manner, producing like results.

Second, harticularly I claim combining with the permanent magnet, an adjustable spring almost sufficient to sever it from its contact with the soft iron of the electromagnet, and a lover, or its equivalent, which, after the permanent magnet has been separated from the iron ty the action of a current, shall iring a tack again into renewed contact by the action of the power which has been called into action by the retreat of the magnet.

Third, I claim the employment of two cog wheels or circuit breakers at each station, so arranged that one shall be in connection with the electro magnet at the same station, and the other in connection with the transmitting cylinder at that station, the whole being arranged so that the connection alternates at each station for every letter between the electro magnet and the transmitting cylinthe connection alternates at each station for every letter between the electro magnet and the transmitting cylin-der at that station, in such a manner that the through con-nection is always simultaneously brough the transmitting cylinder of one station, and the electro magnet of the odier station, wherevy the machine at each station can, at the same time, be transmiting a message and receiving a message; it being understood, however, that I do not

other station, whereby the machine acteach station can, at the same time, be trausmitting a message and receiving a message; it being understood, however, that I do not claim, in general, the use of a single wire for the simultaneous transmission of different messages by means of rapid changes of connection, which is not new, but only the peculiar manner as claimed, in which I have applied it in connection with my machine.

Fourth, so ar, anging a bolt and operating the same by a cam, or its equivalent, that itshal act upon a wheel attached to the shart of the type, so as to preclude the intelligence from one stations off the circuit from which it is desired to withhold the communication.

Fifth, I claim the employment of a vibrating spring properly weighted at its extremity, if necessary, and so arranged by a series of mechanism as to govern and regulate the movement of the type wheel. This I claim also as a governor in other machinery, without limiting its use to its connection with electro magnetism.

Sixth, I claim printing by oscerro magnetism by a continuously moving type wheel, printing while in motion. Seventh, I claim the arrangement of a cylinder with pint spirally arranged thereon to operate by contact with metaline points to class and break the circuit, when this is combined, for the purposes set outh with the systems of seysant catches, so arranged that any desired goint may be thrown into a position, where it will be retained untuit it is struck by its corresponding pin.

WIND MILLS-M. S. Johnson, of Palatine, Ill.: I claim the particular mechanical devices, so arranged for the purpose of housing the sails, as and for the purposes sectorin.

PRINTING MACHINE John M. Jones, of Palmyra, N. Y., I claim the manner of attaching the lever, D. to the wheel, A, so that the same may currisaid wheel, while is uncrum rests upon a traced piate, N, situated below the tovolving wheel, A, allowing at the same time a revolv-

revorting wheel, A attowing at the same time a revoluing motion, and a motion in the direction of its axis to the
wheel, A, said lever, D. being connected with the mechanism by the rod, S, passing through the hollow shaft
or the wheel. G, substantially as described.

The arrangement and use of the lever, C, for the purpose of pressing down the type on the paper, when an impression is to be made, and at the same time insure aiways the right position of the type and wheel, A. In the
mathier specified.

I claim the swinging wheel, G, attached to a hollow
shaft having projections on its periphery corresponding in
number and direktions to the type for the purpose of moting the carriage, L, with the paper attached the exact
distance necessary torprinting one letter after the other,
acted on and arranged in the manner, substantially as
described.

WATER METER—N. B. Marsh, of Cincinnati, Ohio: I am aware that elastic diaphragms have been used for various purposes; this, therefore, I donot ciaira.

But a cann the manner of punching the diaphragm between the panes, I g, so as to perfectly and at all times pack the loant between the chambers, which it divides, viz., by means of the projecting franges on each, tapping pasteach ocher, and the nuts to held them to ether, as tepresented.

Second, the double reversing valve movement, as described, viz., the two solid cylindrical valves, rs, having their spindles connected by a rocking beam, and playing within tubes, tu, communicating at their ends with the supply and discharge respectively, and with the respective compartments of the measuring cylinder, by means e compartments of the measuring cylinder, by means apertures in their sides.

HYDRAULIC ENGINE—Augustin Miller, of Graftor do not claim the invention of hydraulic engines, as have been used before.

have Leen used before.

But I claim the combination of the cut-off motion with
the relief pipes, c.e., as described, for the purpose of cutting off the stroke at any desired stage, withous being compened to waste the power by working the piston against
atmospheric pressure, as set forth.

SURFACE CONDENSERS FOR STEAM ENGINES. J. M. Miller, of New York City: I claim passing the water of Miller, of New York City: I claim passing the water of condensation in or upon the main body of the condensing surfaces on its way to the bolier under the pressure of the steam and the cord external water on the cliter portion of the surface, as set forth.

Gas Generators.—Max Pettenkofer and Chas. Ruland, of Munich. Bavaria. Patented in Bavaria Feb. 24, 1851: We claim the construction and arrangement of the many chamtered regenerators for making gas from wood or vegetable fiber, as set forth, whereby the primitive vapors of destructive distillation of wood or vegetable fiber are progressively heated up beyond the heat in the retort, as set forth.

SETTING ARTIFICIAL TEETH—W. G. Oliver and Thos. Harrison, of Buffalo, N. Y.: We claim making the teeth with grooves in their cheeks and attaching them to the plate by fusible metal cast into said grooves, as set forth. We also claim making the plate and attaching the teeth at one operation by casting, as described.

ELEVATOR FOR COTTON, SUGAR CANE, &c.—E. Price, of Water Preof, La., I claim the arrangement of the table, I, with the carrier apparatus, as described and represented, for purposes mentioned.

ble, I, with the carrier apparatus.—
resented, for purposes mentioned.

Floating Drawbridge—Mappeleon B. Proctor, of Burlington, Vt. I claim the construction of a floating drawbridge by erecting a wharf or dock on each side of, or pardly or wholly within rivers or other waters, over or across which such bridge may be required, with a slip in one of said docks or wharves of a suitable size, for the reception of a boat of proper dimensions, viz., nearly as wide as the slip and about twice the length of the open space between the docks or wharves (through which open space vessels may pass and re-pass) which boat, by steam or other power, can be readily worked forward from the slip to the opposite dock or wharf, and thus form a connection therewith and back again into the slip, leaving a space or channel open for the passage and re-passage of

HANGING RECIPROCATING SAWS—John Robingson, of New Brighton, Pa.: I do not claim merely attaching the lower end of the saw to the pitman, tor that has been previously done in cases where the saw has been placed massash or frame. But I claim attaching the upper end of the saw, J. to the pendant or arm, G. which is connected to the upper frame, E, and the lower end of the saw to the pitman, H, just above the point of connection of said pitman with the lower frame, E, substantially as shown and described, for the purpose specified.

Music RACK—Thomas Ward, of Birmingham, Pa.: I claim the jointed or adjustable bar, G, and the bar, F, provided with the blade, L, and attached to the sliding bars. E E, by the sliding springs, e e, the bar, G, having a plate, J, attached to it. provided with a spring, k, the above parts being fitted in a frame, B, which is allewed to fold or be turned in a vertical or horizontal position, the above parts being arranged as shown for the purpose specified

EXTRACTING STUMPS—George W. Zeigler, of Tiffin, O., and Manasseh Grover, of Sandusky, O.: We claim utilizing the weight of tree, while falling, for extracting its stump ly the combination of chains and hooks and aduster substantially as set forth.

CARRIAGE SHAFT COUPLING—James D. Larven, of Columbia, Tenn.: I am aware that the ball and socket or universal joint coupling is old, and that a journal with a spherical enlargement in the center is old, and therefore I do not claim either the one or the other.

But I claim the improvement upon couplings for carriage shafts or tongues, which consist in enlarging the journal of the shart iron in the center so as to form a globular, ellipsoidal or double conical bearing surface, and clamping the same between the clip irons countersunk as described, by means of screws, or other equivalent devices, so that the wear is entirely upon the enlarged surface, and all lateral play and rattling of the clip irons are prevented.

I also claim in comtination therewith the leather packing, as described, for the purpose of retaining the lubricating material.

Indicating material.

Suppace Condensers for Steam Engines—Nathan Thompson, of Williamsburgh, N. Y.: I claim, first, an elastic junction of a tube with a tube sheet composed of a thimble on a tube sheet and a short piece of elastic tubing applied thereto, and to a tube end or a collar on a set of tubes, substantially in the manner and for the purposes specified.

Second, I claim uniting firmly several small tubes into a collar, which latter is attached to a tube sheet by means of a slip or elastic joint, where by several tubes required only a sing lestuffing; box or elastic junction in order to compensate for their expansion and contraction, substantially as set forth.

And lastly, I claim in conjunction with an elastic junction such as is described, metallic clamping rings, or their equivalents, applied substantially in the manner and for the purposes specified.

Excayating Scoops.—John Taggart, of Roxbury.

Excavating Scoops.—John Taggart, of Roxbury, Mass.: I claim applying one or two discharges within a pair of scoops, sustantially as specified, and so as to operate therewith, or Le operated thereby, in the manner and for the purpose essentially as explained.

LINING METAL PIPES—A. D. Puffer, of Somerville, Mass.: I claim the method described of lining metallic pipes with gutta percha, the pipe being drawn down upon the lining in the manner set forth.

ASH LEACHING APPARATUS—Philip Perdew and Alexander W. Brinkerhoff, of Sycamore, O. We claim the me chanical arrangement and combination of the mealife pen and reservoir with the tube and wooden screw for the purposes set forth, and all else we disclaim.

GAS RETORT CLEANERS—Samuel H. and Matthew C. Walker, of Lancaster, Pa.: We claim providing the retort with a receptacle, D, below its bottom, and applying in connection therewith a scraper, F, arranged and operating substantially as described, to scrape the residuum from the bottom of the retort into the said receptacle, without suspending the operation of the retort.

SAW SET—Edward S. Watson, of Chenango Falls, N. Y. I claim the arrangement of the side see screws under the ted for the saw place, and the central adjusting screw for giving to the bed and the saw blade the inclined position, and thus allowing the tooth of the saw to have given to it the curved or twisted face, asset porth.

Working in Sheet Metal.—J. B. Holmes, of Cincinnati, O.: I claim the use of corrugated plates, 2 and 3, constructed as described, and operating in connection with the eccentric bending and gauging shafts, 4 4, in the manner and for the purposes for forth.

WEIGHING CART—James W. Martin, (assignor to Lewis Rotherwell and James W. Martin, afore.aid.) o. Eurinington, M. J. : (Laim the levers, E. E. H. t.connected with the scale beam, G. in combination with the Lers, I and J. arranged and applied to the cart as shown for the purpose specified.

VENTILATING REGISTERS AND DAMPERS FOR STOVES

John Magee, of Lawrence, Mass., assignor to himself
and william J. Towne, of Newton, Mass.; I lay no claim
to the invention of having an air passage leading lot of the
downward draft flue, and provided with a door opening
outward.

Nor do I claim the principle of applying a damper so
that it may be common to two or more openings or
liues.

tiues.

But I claim combining with or arranging in the flue pipe, I, when the stove is constructed substantially as described (viz., with two discharge pipes, H I, arranged as specified) a rectangular box or chamber, b, formed with an opening, e, and so as to receive within it and permit to operate in manner as described a rectangular valve or damper, d.

MAKING ROPE AND CORDAGE-Wm. R. Dutcher.

MAKING ROPE AND CORDAGE—Wm. R. Dutcher, (assignor to Harvey Church) of Troy N. Y.: I do not claim the wheels, 7 and 8, and other gearing for giving a larger or smaller amount of twist to the strands, neither do I claim rubbing down or sizing the yarn.

I do not ciarm regulating the tension of warps or strands by means of a wire or c rd in a grooved disk. Neither do I claim a belt or strap running around bobbins as they stand in a circular range for the purpose of rotating such bobbins.

stand in a circular range for the purpose of rotating such bobbins.

Neither do I claim arevolving tube passing the strands, nor a plate or lay-up block through which the strands pass. But I am not aware that a pipe has ever before osen fitted above each lay-up block in such a manner as to regulate the tension of the yarn by adjusting said pipe nearer to er further from the said lay-up block.

I do not claim the grooved cone, t, as this has been used in connection with such cone, therefore I do not claim the same, but limit my claim, as hereafter specified, to the peculiar construction of the parts.

I do not claim leading the yarn or sliver off to one side of the enclosing can; but where bobbins are made use of there mast be sufficient distance between the bobbin and the hole through which the yarn passes to allow said

there must be sufficient distance between the bobbin and the hole through which the yarn passes to allow said yarn to pass off treely; hence in cases where the yarn is not towards the center of the circular range of bobbins, that range has to be so large to provide for the above requirement that the machines become heavy and cumberseme; therefore I lead off the yarns to the opposite side of the range to where the bobbin stands, which provides sufficient distance to cause the yarn torun off with a unitorm tension from the top and bottom of the bobbins, and thereby said bobbins can be brought into less space. The holes in the arms thus do not become regulators of the tension by their size, but provide for the yarn being drawn off in such a manner as not to be varied in its tension by any varying angle of the yarn in passing off the bobbins.

sion by any varying angle of the yarn in passing off the bobbin.

I claim, first, the arrangement of the gear wheels, h and i, pinions, 13 and 14, plate, k, and ring, 12, for sustaining and revolving the creel shatts, b, as specified.

Second I claim the adjustable friction wire or cord passing around in the disks of the circular ranges of bobbins, thereby simultaneously regulating all the yarns in each range to precisely the same tension, substantially as specified.

Third, I claim the adjustable tube, 18, over the center of the lay-up block, q, for the purpose of regulating, by tis proximity to said lay-up block, the tension of the various yarns composing the strands, as specified.

Fourth, I claim the construction of the lay-up cap, s, on the end of the shaft, c, fitted to receive the movable cone, t, and adjustable tube, 24, in the manner specified, so that the tube and cone can be conveniently changed to adapt the parts to laying up different sized rope or cordage.

Fitth, I claim leading the yarn off from the bobbins to a hole or guide on the arms 4.3, or their equivalents, on

a note or guide on the arms 43, or their equivalents, on the opposite side or nearly so of the circular ranges of bobbins in the creel, for the purposes and substantially as specified.

TURNING IRREGULAR FORMS—Milton Roberts, (assignor to himself, Isaac Roberts, and Isaac N. Felch,) of Belfast, Me.: I claim the automatic lathe attachment for turning figured wood work, substantially a transverse and longitudinal movement produced by cranks, G.G., and inclined planes, E.E., or their equivalents, and tooth rack, D.

I.OCOMOTIVE AND R. R. LAMPS—John Stuber, (assignor to John Carton,) of Utica, N. Y., I do not claim as new the forcing of the oil from the oil chamber into the burner by means of the spiral spring and valve, nor the opegating of the valve by means of the ratchet bar and key as described, as these devices have heretofore been used.

and key as described, as these developments been used.

But I claim the tubed structure, A', as combined with the burner to regulate the flow of the air to the exterior of the flame of the lamp as described.

I also claim the arrangement of the feeding cup, t, and the tube, u, provided with the regulating spirally grooved fillet, A, in the manner described and for the purposes specified, arranged and combined substantially in the manner and for the purposes set forth.

DESIGNS.

Stoves-Samuel W. Gibbs, (assignor to W. and T. Treadwell, Perry & Norton.) of Allany, N. Y.

PARLOR STOVES-David Hathaway, (assignor to Cox, Richardson & Boynton,) of New York City. COOKING STOVES-Thomas A. Herrick, of East Bridge-water, Mass., (assignor to Lemuel M. Leonard, of Taun-

Romance of the Steam Engine.

Viewing one of those gigantic engines to be seen in some of our steamers, who will deny that there is something awfully grand in the contemplation of it? Stand amidst its ponderous beams and bars, its wheels and cylinders, and watch their unceasing play, how regular, yet how wonderful! A lady's Geneva watch is not more nicely adjusted,—the rush of the waterfall is not more awful in its strength. Old Gothic cathedrals and ruined abbeys, are solemn places, teaching solemn lessons touching solemn things, but to the contemplative mind, a steam engine can preach a solemn lesson, too: it can tell him of mind wielding matter at its will; it can tell him of intellect battling with the elements; it can tell him of genius to invent, skill to fashion, and perseverance to finish. No man knows the powers of his own mind until they have been exercised. Thousands have sunk into an obscure grave, in whose soul the living fire of poetry, or the bright sparks of genius lay hidden and lost, which merely wanted education to cause them to shed a luster over their race. And in some retired spot, may remain the mortal tenement, from which the soul of an Arkwright, a Scott, a Davy, a Watt, or a Webster may have fled, which merely wanted education and opportunities for this developement. And ought it not to be a lesson to those who laugh at novelties, and put no faith in invention to think that the mighty steam enginethe triumph of art and skill, was once the laughing-stock of jeering thousands, and once the waking notion of a boy's mind, as he sat, and in seeming idleness, mused upon a small column of steam spouting from a teakettle.

Prevention of Steam Beiler Explosions.

In spite of the great amount of information that has been published on exposions, it pains us to hear of so many continually taking place. It appears to us that many of these are caused by ignorance on the part of those having charge of steam boilers. It will be an act of humanity on the part of our brethren of the Press to publish the following instructions to engineers and firemen, as by so doing many steam boiler explosions may thereby be prevented :-

Every steam boiler should have a good water gauge on it; also a steam pressure gauge. These must be watched constantly. There should also be three try-cocks on each boiler, and these should be tried often. The water should never be allowed to fall below the second cock. The safety valve should also be tried often, to see that it is free, as it sometimes sticks in its seat. If by priming, or any other cause, the water should fall below the bottom of the gauge glass, draw the fires at once; but if the plates should have become red hot before this has been noticed. and the fires cannot be drawn with safety, close the dampers at once, and on no account let water into the boiler. If the engine is not at work in such a case, it must not be started, nor must the safety valve, nor any other, be opened. The boiler, in such cases. should be left undisturbed until it has gradually cooled down.

The manufactories in Georgia which started full handed, and were based on sufficient capal, have uniformly succeeded; and even during the terrible pressure of 1850 and '51 there was no failure among them. The mauufacturing establishments in that State have multiplied largely within a very few years, and they number now some sixty in the full tide of success. The returns show that the yield on the stock paid in is from fifteen to thirty per cent.

It requires capital to sustain a factory after it is set in operation for at least two years. The beautiful cotton factory at Graniteville, S. C., under the charge of J. Montgomery, Esq., we understand, is doing a very profitable business.