

Scientific American

NEW YORK, APRIL 13, 1850.

Reform of the Patent Laws.

The Bill now before Congress, presented on petition of the Committee of the Convention of Inventors, mentioned in our last number, embraces some new and good features. It clears up many ambiguous points of the present Code, and may be considered as a useful amendment to it.

The second section enacts "that it shall be the duty of the Commissioner of Patents to issue a Patent on any application therefor, unless it shall appear plainly beyond all question, that the applicant is not entitled thereto."

There never was a more necessary amendment required, than this one, at the present moment, for it is the custom of the Patent Office to throw every doubt in the scale against applicants. There are other clauses providing for retaining on file all correspondence, &c., as evidence, relating to applications for patents, re-issues, &c., whether for or against the same, and in case of a rejection of an application, the Commissioner must record in the Patent Office, particularly and at length, the reasons for his decision. The amendments also provide for an appeal from the decision of the Commissioner of Patents, in any case where a party has appeared and opposed that decision, to the Justice or Justices of the Circuit Court of the U. S., where either of the parties reside. This appeal is to be decided by the Judge upon the evidence of certified copies of papers of the case, from the Patent Office, and any other evidence deemed proper by the Court Judge, who is to decide upon the same, and transmit his decision to the Commissioner of Patents, who must dispose of the case in conformity to the said decision. It is also provided that if any person shall give notice to the Commissioner of Patents, in writing, to be heard in opposition to the re-issuing of a patent, it shall be the duty of the Commissioner to give him a hearing. The main and most original point of the proposed amendments is a plan to repeal a patent by a writ of *scire facias*. The present law provides that the Court can declare a patent null in whole or in part, according to the 16th section of the law of 1836, but the section is a miserable piece of composition, and has been the means of doing a great deal of evil—we are glad to see that the present amendments clear up and define the principles of action embraced in this section. The amendments also provide that when an application is rejected in consequence of the subject matter being described in whole or in part in some printed publication, the person interested therein shall be furnished upon the payment of proper fees, with copies of illustrations and descriptions of the said publications referred to. We are glad to see this proposed amendment.

Section 25 of the amendments provides for the printing of the specifications in one and not more than three periodicals, to be issued as often as once per month—the patents to be illustrated with wood engravings. The Commissioner is to advertise for proposals, and contract for five years with the lowest bidder. We are not opposed to this section, only, if carried into law, the Commissioner must make clear and definite proposals—no tricking must be allowed. It is our opinion that some people have an eye on the "loaves and fishes," and make a great pretence of affection for inventors' rights. A magazine originated in Washington three years ago, called the "Mirror of the Patent Office." The projectors of it tried to make a haul on the Patent Funds in the shape of an appropriation, all for the charitable object of "inventor's benefit"—good souls they were too full of the milk of human kindness to look for any benefit to themselves. Well, they didn't get the appropriation, but others have taken the hint, and there is no telling what may be the result. Should the proposed amendments, or any part of them, become law, we will publish them in full.

As our contributor, "Junius Redivivus," touched on this resolution of the inventors convention, in one of his articles, we have but a

few words more to say about it. It is very evident that all those who voted for it did not know what they were about. The whole income of the Patent Office would not suffice to print every specification, illustrating the drawings with wood cuts. The wood cuts for some patents could not be got up for less than \$150, yea, we know one patent which could not be illustrated for less than \$300. The wood cuts alone to illustrate the drawings of West & Thompson's Clasp Coupling Joint patent, cost \$60, just double the fee paid into the Patent Fund, and they were done very cheap. We like to see men who attempt to make improvements on law, understand their business. Let the spare change in the Patent Treasury be first devoted to publish the past history of American Inventions.

Curious Drugs for Producing Hallucination.

From time immemorial the singular effects produced upon the mind, by drinking wine, &c., has been known to the inhabitants of every nation. It is however but a short time since a knowledge of inhaling certain gases into the lungs produced effects nearly akin to that of drinking alcoholic drinks. It is but a few years since ether was discovered and intelligently applied to produce entire insensibility of the nerves; and it is only two years since Chloroform was brought to light, as the best substance to be used for this purpose.—This singular substance is now employed in our Hospitals for the most humane purposes. A knowledge of a letheon, like Chloroform, has been claimed for the Chinese Doctors, as far back as the third century, but when was there a discovery brought forward that was not claimed by some pedantic antiquarian, for the Chinese, Hindoos, or the Egyptians. That the Chinese Doctors used opium to produce insensibility, we do not doubt, and that they have been long acquainted with some singular things, unknown to us, no one will deny, but not gases; and this is especially true of a singular drug called *Hashish*, which, when eaten or smoked, produces the most singular mental phantasmagoria. The Hindoos, however, seem to be better acquainted with it than the Chinese, but it is only within a few years since a knowledge of its peculiar effects was made known to Europeans. This drug is a preparation of Indian Hemp. A recent article in the Paris Medical Times gives an account of an experiment made by a physician with some of it upon a number of individuals. He went to a familiar *Cafe*, selected his subjects and gave a single grain to each. Some bolted it, others smoked it; one individual merely smeared about a quater of a grain over his cigarette paper. About one grain was dissolved in a glass of Curacao, and this was allotted to the master of the house. His two young and handsome daughters were forbidden to taste of the drug; but the physician had here evidently forgotten his Scriptural history. About three-quarters of an hour passed quietly over, and the curious were rapidly lapsing into incredulity, when a short laugh, followed by an awful and most piercing shriek, issued from an inner apartment. The youngest daughter, following traditional example, had tasted of the forbidden object, and was suddenly struck with delirium and hysterical movements of a very alarming appearance. Consciousness was only one half obliterated, and the mind seemed to make supernatural efforts to escape from the chain about to be thrown around it. The shrieks were rapid, most violent, and is a peculiar kind. The girl felt conscious that she was raving, and earnestly entreated all around her not to conclude that she was mad; each appeal being terminated by a heart-rending scream. Some internal sensation also compelled her to cry, every now and then, that she was dying. With great difficulty she was conveyed to bed, where the delirium continued for four hours. As if a signal were sent by this mischance, the young men in the *cafe* went off about the same moment. The effects were not, however, so violent. They were extremely varied. The individual who had smoked some hemp (half a grain) in his cigarette was suddenly attacked by violent fits of laughter, which compelled him to roll on the floor, during which he exclaimed that something was

raising him up to heaven. These fits resembling hysteria, did not last more than ten minutes. Another individual, instead of being agitated, fell suddenly into a deep sleep, bolt upright against the wall, with the chin sunk on his chest, and features in the most perfect calm. Were it not for the deep, slow inspirations, one would have thought him defunct, for the face was deadly pale. So profound was the sleep, that it continued for three hours, despite the shouts and screams of the excited bacchanals who danced around him, for in the majority the hemp merely produced intoxication. In all, the excitement was soon followed by an invincible tendency to sleep; the benches were strewn with the slain, and delightful dreams, producing strange laughter, repaid the adventurous tasters for their curiosity.

The love of excitement is so strong in man that he seeks it by some means or other, hence in those countries where wine is forbidden, opium and tobacco are used as substitutes. At the foot of the Himmaleh mountains, a hemp grows wild, from which a liquor is made which produces intoxication of the most dreadful kind, exciting every passion in a high degree. A man under its influence looks like a madman, and exhibits his excitement by dancing, singing, shouting, and tossing his arms. The Hindoos, some of them, are very fond of it; particularly peltry-bearers. They say it makes them forget all their pains and fatigue. The name of this hemp, and the preparation from it also, is "Bhnm." The drug "hashish" is made from this hemp, and it has been reared in France for experimental purposes. The peculiar effect of the "hashish" is the inversion of the order of time—a minute becomes an hour, and scenes like those described in the Arabian Nights Entertainments flit before the mind, with all the wonderful phenomena of genii, fairies, palaces of gold and silver—the real scenes of "Alladdin and his Wonderful Lamp." A frequent use of the drug is dangerous to sanity and health, as is the use of all unnatural stimulants. In commenting upon any subject, authors and editors should always have a moral in view—to warn where there is danger, to encourage where there is hope. It is a fact that almost every person often craves for some mental stimulant, and, alas! too many are weak enough to indulge in gratifying an appetite which feeds on that which destroys it. He who conquers his passions and appetites, and brings them into the subjection of whatsoever is pure and lovely, exhibits a greatness of mind. Regular habits, plain food, cheerful and healthful exercise, the performing of charity and the reading of good authors, will impart a cheerfulness of mind and a healthfulness of frame, which no one knoweth but those who follow after these things.

The Woodworth Patent.

There is a great excitement throughout our whole country respecting this patent, and the universal expressed opinion is, that it exists now, as an Act of Congress, gained by misrepresentation—and money on the one hand—and an easy virtue of members on the other. It is allowed to be an unjust monopoly—that the instrument is held by individuals as a patent monopoly granted by Congress for an invention of William Woodworth, which he never invented, and never pretended to have invented.

In 1828 William Woodworth received a patent for improvements in Planing Machinery, and after he was dead and in the grave, his son and assignees surrendered the old patent, made out a new specification, and got a re-issue covering an invention which has been decided by a Jury in Baltimore, not to be the same at all, as the invention of the deceased Wm. Woodworth and not embraced in his specification.

The most energetic measures have been taken in this State to get the patent abolished, and our Legislature has passed resolutions instructing their Members in Congress to search into the matter. In Philadelphia a large meeting was held on the third inst., and I present some of the resolutions passed, to show the state of public opinion there:

"Whereas, from evidence before your Committee, they doubt whether William Wood-

worth was the inventor of the original patent granted to him in 1828, for a planing machine, and it is clearly shown that his amended specification and claim, on which this patent was extended by an act of Congress, is different from the original, and is so formed as to embrace almost unlimited range of machinery, not included in the original patent—consequently this act must have been obtained by misrepresentation. And whereas, the great and extensive demand for such machinery as is embraced under the new claim of 1845, has enabled the owners of this patent to demand enormous sums from the various kinds of mechanics using such machinery, which they must pay, or incur the hazard of litigation.—Therefore,

Resolved, That originators of valuable inventions deserve encouragement and protection, and nothing so much endangers their security as fraudulently obtained patents and frequent renewals by Congress through misrepresentation.

Resolved, That the re-issued patent to the administrators of Wm. Woodworth, combines important improvements, which other mechanics have made in similar machinery, since 1828, and covers principles and combinations never invented or claimed by the original patentee. That such re-issued patent is in the judgment of this meeting an imposition, and they protest against that renewal being sanctioned by legislative construction."

A model was exhibited and some powerful speeches made.

The present patent of Woodworth expires in 1852, and the assignees intent on taking time by the forelock, have lobbied all this Session of Congress to get a renewal of their special Bill for another 7 years to commence after the present term will expire. It is likely that instead of a renewal, there will be a repeal, although the majority of the Patent Committee, with a glorious beef soup generosity have recklessly reported a Bill for a renewal—a thing which they had no honest business to do.

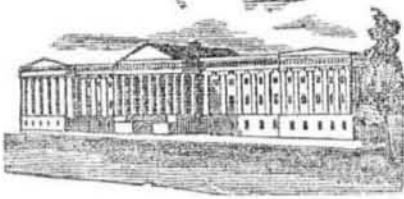
Mr. Otis has presented a minority report and made a powerful speech against it. The following is an extract:

"If you pass this bill as reported, Woodworth, the elder makes an invention—meritorious it may be—secures a patent, sells it out, and dies. His son and administrator has it renewed, under the patent law, for seven years, and again has it renewed by Congress, four years before the expiration of the first seven, for seven years longer. Six years after the death of the original inventor, he surrenders up his patent as invalid, and takes out a new patent, which is also declared, by a jury to be invalid for claiming what was not claimed under the first patent. The disappointed litigant comes here and asks you to pass a law for his special benefit, by which he is to obtain a legislative sanction to his unjust claim. He is not the inventor—his father is not the inventor. Congress alone gives him a title to what he was not entitled to without Congressional interposition. Armed with this he goes into Court and defeats his opponent. Armed with this, having his principle and application sanctioned by a law of Congress, he suppresses all other machines, puts his own price for the use of his machines, and thus secures for twenty-one years, a monopoly worth millions to the possessor. The person who invented this new machinery for cheating his neighbor in Legislature, and for deciding law suits, deserves a patent for his ingenuity in management, if he does not deserve one in mechanics."

However flexible some few may be to get the applied for renewal made into a law—which should occupy the attention of a subsequent Congress, Mr. Otis shows that the managers of the business "know their business." Just think of getting a special law passed for a set of generous speculators, four years ahead of the time it went into operation. Was there no corruption, that single view of the case—in the act itself, is a disgraceful one in every sense of the word. In Congress, as in a House of Worship, "every thing ought to be done in decency and in order," but the opposite of this is the true picture in too many instances.

JUNIUS REDIVIVUS.

New York.



## LIST OF PATENTS CLAIMS

ISSUED FROM THE UNITED STATES PATENT OFFICE,

FOR THE WEEK ENDING MARCH 26, 1850,

To R. Cook, of Saratoga Springs, N. Y., for improvement in blast-pipes for conveying heated air and gases to furnaces.

I do not claim the discovery of this method of creating a partial vacuum or draught, through one pipe or aperture, by the varied movement of a fluid in another pipe, with which the first is connected having its mouth or orifice in contact with the fluid in motion; but what I claim is the application of this method of creating such draught or partial vacuum, to the return of the smoke and other escaping products of combination to the fire, in order that such of them as are combustible may be there consumed, the method or means consisting substantially in the manner of employing the blast pipe, inclosing the hot air pipe, as herein set forth.

To G. Fletcher, Sen., of Greensburg, Ind., for improvement in Bee-moth traps.

Having thus fully described the nature, construction and operation of my improved Beehive Cleaner and Protector, what I claim therein as new and desire to secure by Letters Patent, is the combination of the fluted roller operated as described, with the moth entrance of the beehive to act as a moth catcher and killer, substantially in the manner and for the purpose described.

To G. Fletcher, Sr., & Turner Barnes, of Greensburg, Ind., for improvements in Seed-planters.

I claim, 1st, the introduction of a cleaning rod, operated as described, in the hollow share of a seed planter, for the purpose of removing extraneous matters that may have entered the orifice tending to impair or prevent the action of the machine.

To A. Fulton, of Pittsburg, Pa., for compound hard and soft metal packing.

I claim the compound metallic packing ring constructed of hard and soft metals substantially as herein set forth, the hard rings being for the purpose of preventing the substance of the softer from squeezing out around the follower and flange of the piston.

To G. P. Gordon, of New York, N. Y., for improvement in Printing Presses.

I claim, first, the peculiar manner of constructing the nippers so that their upper surface shall be even with the surface of the paper, and their inclined or curved surface shall incline away from the surface of said paper.

I also claim an adjustable table, to be adjusted to the nippers, being first adjusted to the pipe or forms substantially as above set forth and described.

I further claim a frisket operated on by the motion of the carriage, so that when the carriage goes in with the sheet its forward end shall raise under and support the paper, and (from the upward pressure of the nipper, against the platen in giving the impression,) grip it firmly and relieve it from the type after the impression is given, and on the receding of the carriage with the printed sheet, its forward end shall lower and allow the said sheet which rests upon it, to slide or fall off into a box or draw placed to receive it, operating substantially as above described.

I further claim the application of the vibratory power to the handle of a distributing roller, (said handle projecting from the frame of said roller midway from its respective ends,) and not to the end of the roller frame as in general use.

I further claim the combination and arrangement for opening the nippers when the carriage moves out with the printed sheet, and closing them just previous to its going in, which combination consists of the horizontal bars or polls, the curved pieces, the lever attached to the shaft, the hub, with its projection, on the main shaft, and the spiral spring, one end of which is attached to the press frame, the whole

being arranged and operating together substantially in the manner herein before set forth and described.

[This is a general claim which we could not abbreviate.]

To C. Guiteau, of Syracuse, N. Y., for improvement in correcting magnetic needles.

I claim the method herein described of producing perfect harmony and coincidence between the axis of a magnetic needle and the magnetic axis; and also of producing perfect harmony between any number of magnetic needles, to wit, removing portions from the needle whether by the formation of channels upon the upper or lower surface of the needles, of the form and in the position substantially as herein set forth, or merely by grinding or filing or cutting away, as above set forth.

To E. H. Hyde & R. Dawson, of Haydenville, Mass., for improvement in Fountain Pens.

What we claim is the combination of the moveable spring tongue, with the pen, (for the purpose of forming a fountain pen,) when the whole is constructed, arranged, and combined, substantially as herein described.

To H. Iverson, of New York, N. Y., for improvement in revolving breech fire-arms.

I claim first, the arrangement of the arm, or their equivalents, whereby the motion of half cocking, and cocking the hammer, is communicated to the barrel to open the joint formed by the grooves, around the breech, and also to close said joint on the discharge of the piece by the operation of the hammer, slides, and spring alone or in conjunction with the main spring, substantially as described and shown.

Second, I claim the arrangement of the slide, and circular ratchet, or their equivalents, whereby the motion of the barrel sliding forward, is made to revolve the chambers the required amount, to bring the next chamber, in line for the next discharge of the piece, substantially as described and shown.

To A. Jennings, of Fall River, Mass., for machines for forming rotary cutters.

I claim the arrangement upon puppet heads having a sliding motion upon a bed plate, of adjustable slides, supporting disks to which are attached the boxes in which the cutter shafts revolve, the disks being capable by means of vibratory motion on their axes, of adjusting the cutter shafts to any required angle with the horizon, and the whole machine being for the purpose of shafting at the same time, both faces of a revolving cutter, substantially as herein described.

To L. Lamborn, of Kennett Square, Pa., for improvement in Cultivator Teeth.

I claim, 1st, the manner of constructing the cultivator tooth substantially as above described, by which a separate steel cutter is embraced between the two halves of the tooth removable at pleasure and by which wedges can be applied against the shoulders of the tooth and the under side of the beam for the purpose of changing the angle of inclination of the share in order to increase or diminish the depth of culture, the tooth turning on the bolt passing through the head of the same and the beam, whilst inserting the wedge, the wing of the tooth being secured to the four sided changeable share, by means of screws and nuts or other equivalent means.

To L. Moore, of Ballston Spa, N. Y., for improvement in printing floor oil-cloth.

I claim the combination of the stops, with the block, by which the printing of the floor oil cloth is performed without moving the stops until the first printing is finished, and dispensing with a second block to cover the parts of the cloth not printed, at the first operation by simple changing the position of the hinged gauges on the block without moving the stops on the bar as above described, thus dispensing with the second block usually employed.

To S. S. Rembert, of Memphis, Tenn., for improvement in Threshing Harvesters.

What I claim is the mode of cutting and threshing the grain by forcing the same against the knife, and after being cut, between the teeth of the concave, and the teeth of the gathering or threshing wheel, or shaft or bars or beaters, during the progress of the machine as herein set forth.

[This, we have been informed, is a real good invention; it was illustrated in No. 5, present volume of the Sci. Am.]

To Ira Reynolds, of West Liberty, Ohio, for improvement in Plow and Clevis.

I claim, first, making the reversal point, with the triangular shoulders, in combination with the screws, and nut, for binding firmly together the land side, mould board, cutter, and share, as well as securing itself, in the manner herein fully described.

2nd, I claim the device of fastening the reversible share to the flange on the lower part of the mould board, substantially as set forth.

3rd, I claim the mode of employing the inclined brace rod, in combination with the box plate, cast on the inside of the mould board, for adjusting the beam to take more or less land to act as a substitute for the clevis, and at the same time to brace or stiffen the wood-work of the plough by attaching it to the cast iron mould board and land side, as described.

To F. Searle, of Springfield, Mass., for improvement in Dental and Surgical Chairs.

I claim the application to chairs of the middle section, substantially as herein described, whether operated by rack and gear, or by lever, or windlass, or screw, at two corners of the chair or at four, or at any intermediate point, provided the same results are obtained by substantially the means herein set forth.

To A. N. Severance, of Cherry Valley, Ohio, for improvement in Cheese Presses.

What I claim is combining with cheese presses, two beds upon which the cheese is alternately pressed, which revolves together on a horizontal axis, substantially in the manner and for the purpose herein set forth.

To G. Wales, of Liberty N. Y., for improved method of dressing cut tobacco.

I claim the method of dressing cut tobacco by passing it through a revolving cylinder, having holes through it, to sift the short from the long pieces, and with hooks or pegs projecting from its inner surface towards the centre, for lifting the threads of tobacco, as described.

To E. Wicks, of Bart Township, Pa., for improvement in the Seed Roller of a Seed Planter.

I claim the before described mode of constructing the planting cylinder, by which the cavities or cells, in the periphery are enlarged or diminished simultaneously by simply turning the plate, or other similar device, having its sections of male screws on its inner face, and causing said sections to act on all of the radial slides, forming the bottoms of the cavities at the same time and holding them firmly in the required position, by the thumb screw, or other equivalent mechanical device, substantially as aforesaid, by which like results are produced.

To N. B. Powers, of Lansingburg, N. Y., for improvement in printing Floor Oil Cloth.

I do not claim printing oil floor cloths by means of printing blocks made with pitch pine by hand, on a gauge line, as this is the usual mode of printing, but what I do claim is the employment of the before described combination of the gauge, and stops, constructed, arranged, and operated, in the manner and for the purpose above set forth, for guiding the printing block without the use of pitch pine, during the operation of stamping the colors on the cloth, by which the work is rendered much more accurate, and is executed with greater dispatch, and is not so liable to become blurred during the operation of handling the blocks, nor of having the colors to over lap, by a misplacement of the blocks.

## DESIGNS.

S. A. House, of Mechanicville, N. Y., for design for Stoves.

To C. W. Warnick, F. Leibrandt, J. G. Abbott & A. Lawrence, of Philadelphia, Pa., for design for a Portable Furnace.

For the week ending April 2, 1850.

To H. Aiken, of Franklin, N. H., for clamp to be used in the manufacture of wrought iron car wheels.

I claim the combination and application of the above described combined cylindrical clamp, consisting of the following parts, namely the ring, of a shaped section, with handles attached and ring, and screw bolts, applied for the purpose of combining and holding the wrought iron arms, or spokes, in a true circle, together with the pieces, in the centre to form the hub during the operation of welding the several parts together as above described.

To Wm. C. Allison, of Philadelphia, Pa., for improvement in machines for hoisting.

I claim the separate and independent action,

each upon its own axis, of the 2 upper pulleys whereby the buckets or weights are suffered to pass freely between them without let or hindrance.

And in combination therewith, I claim also the swinging of the buckets or weights between the chains so that they shall always hang downward in what ever position the parts of the chains to which they are attached may be.

To E. T. Beers, of Honesdale, Pa., for improvement in Cooking Ranges and heating air.

I do not claim the making of the hot air chamber or radiating pipes, nor furnace and water reservoir individually, but what I do claim is the employment and use of the combination of the furnace and oven in the hot air chamber, with the radiating pipes, flues and dampers, for the purposes substantially as herein above set forth.

To M. H. Collins, of Boston, Mass., for improvement in Chimney Caps.

What I claim as new is the injector, in its combination with the cap plate, tube, and frustum, and made stationary against the cap plate, all substantially as herein before specified.

And in combination with the cap plate, the frustum, and tube, I claim one or more flat plates or rain fenders, as applied and used substantially in the manner, as herein before explained.

To R. W. Davis, of Rogerville, N. Y., for improvement in Churns.

I claim the self adjustable float or slat, which opens when churning the cream and closes of itself when the dasher is turned in the opposite direction to gather the butter as before described.

To W. Davis, of Granville, Va., for improvements in Saw Mills.

I claim 1st, the combination and arrangement of the levers, (five) with the catch bar, and cam, and sliding bar, by which the depression of the foot lever is made to actuate the several levers, and the cam, made to lift the lever, and thus operate the turning bar, and with the gauge bars, and thus set the log, and at the same operation elevate the foot lever and engage the reaching arm, with the rag wheel, to feed the carriage forward as described and represented.

2nd, I also claim, the combination of the upright gauge turning bars, with the horizontal weighted turning bar, holding bars (two,) and eccentrics, (two) thereon, by which the log is set simultaneously at both ends, and the slides (two,) prevented from moving during the operation of sawing by the holding bars, as described and set forth.

3rd, I also claim, the arrangement of the shaft and pinion, for engaging with the rack of the carriage simultaneously with the descent of the foot lever, for winding up a cord and weight, for relieving the tightening lever from the band, and unwinding the same with the ascent of the foot lever, after the setting of the log, and gigging back of the carriage to give motion to the crank shaft, as described and set forth.

To A. Deitz, of New York, N. Y., for improvement in Harness Hames.

I claim, firstly, curving or inclining forward the upper and lower parts of the back or drawing surface and the inner projecting edge of the hame, substantially in the manner and for the purpose herein described.

Secondly, the stock of the draught iron for securing the same to the hame by means of the shaft of the breast ring passing through the said stock of the draught iron and riveted to the hame as described.

Thirdly, the hook studs, for receiving the straps which secure the upper ends of the hames together when on the horse, so as to allow the straps to be easily shifted, constructed in the manner described or in any other way substantially the same.

To S. F. Emerson, of Canaan, Ohio, for improved Atmospheric Churn.

I claim the combination of the dasher with the stationary inclined air channels on the churn tub, the two being made arranged, and operating, substantially as herein set forth.

Steven Everett, of Biddeford, Me., for improvement in Temples used in weaving double cloth.

I claim the combination of the jointed rods with the wheels or pulleys at the ends of the rods.

[Continued on page 234.]