### AMERICAN INVENTIONS IN EUROPE.

It is a fact exceedingly gratifying to the pride of every true American, that American inventors and manufacturers it be the use of fuller's earth. They have, in common with are to-day supplying the Old World with many of its best others of the same nature, the important drawback that they implements. In the matter of improved firearms, we are so are not applicable to all cases. There is no doubt, however, far ahead of the nations of Europe, that many of them are of their utility in some cases. sending large orders to our manufacturers, and where they have attempted to get them up themselves they have almost invariably adopted American inventions.

A writer in the N. Y. Tribune, mentions the fact that the Snider alteration of the Enfield, in England, was an American invention ; the Henry Martin is but a very slight modification of the Peabody gun, and the Swiss gun is the Winchester (formerly known as the Henry) magazine rifle, altered madness only makes them go faster ; death alone can break thoroughly understood. After people had once got it into very much for the worse. At the various trials abroad, the American guns have invariably come out ahead, and the English Commission reported as to magazine guns in favor of, first, the Winchester, and, second, the Ball guns. The foreheads. If we could only get at them, as we lie on our counted for in any other way; just as hundreds of fires caused Messrs. Remingtons, of Ilion, N. Y., have furnished to the pillows and count the dead beats of thought after thought by carelessness, not easily detected, are charged to the mys-Danish Government 25,000 of their celebrated breech-loading rifles, and to the Swedish Government, 25,000; while this year they will send to Europe generally fully 100,000. These rifles have been sold to Austria, France, Italy. Spain, Egypt, chine with gunpowder? What a passion comes over us notum pro magnifico est might be read omni ignotum pro nirand Cuba, in smaller quantities, with a prospect of much larger sales in the future. Colt's Company is completing unwinding the endless tapestry of time, embroidered with marvel. We need not be surprised, therefore, that this idea 30,000 Berdan rifles for Russia, and it is ramored that the spectral figures of life and death, could have but one brief of human combustibility, which was not inconsistent with order has been increased to 100,000. At the same time Col. Berdan has gone to Russia to superintend a factory there, probably for altering their present arms. Turkey has bought 200,000 of our rifles, and sent them home, and has just completed the purchase of over \$60,000 worth of machinery, with which to convert them into breech-loaders, on the plan, probably, of those altered at Springfield. Sharp's Company have been converting 30,000 of their rifles and carbines into metallic cartridge guns for our Government. At the same time the Winchester Company is turning out over 100 per day of its repeating rifles, and is increasing its works. It has also bought out the Spencer Company, of Boston, including the Spencer and Fogarty patents, thus combining and controlling 'crash. Ah, they remembered that-the kind city fathersall the prominent magazine guns, except the Ball, which is and the walls are nicely padded, so that one can take such owned by the Windsor Company, of Vermont, and of which exercise as he likes without damaging himself. If anybody quite a number have been recently sold in Persia. The Winchester and Remington rifles are being sent to China and thrust in among the works of this horrid automaton and Japan, and the former are also sent to Australia, as well as all over the West, the Plains, and the Pacific coast. Nearly one-half of the entire product of Smith & Wesson's pistol machine by some indirect system or other. They clap on the factory, employing some 300 hands, is sold in Europe, mainly in France, notwithstanding their cheaper labor. This result is of course due to the fact that they are mainly the product of machine labor, which machines are themselves of American ments directly, that we thrust these coarse tools in through invention and manufacture, and which produce an accuracy of work and finish that their hand labor cannot equal. But rate of going for a while, and at last spoil the machine. not only are we furnishing Europe and the Old World gener. Oliver Wendell Holmes. allywith arms, but we are also supplying them with ammunition. The Union Metallic Cartridge Company of Bridgeport, under the control of Hobbs, of lock fame, is furnishing metallic cartridges-far superior to any ever before seen-to nearly all the world. They had one order of 25,000,000 from the Russian Government, and it is reported that the order has been cyclopedias, which refer to "well authenticated instances" increased to 100,000,000. They make them of every variety, of such combustion. Let us examine this matter in the light and size, their sale of one small size for pistols averaging of what is actually known. 45,000 per day, a large portion going to Australia. And these, too, are all made on machines invented by Americans, the like of which do not exist elsewhere in the world. In addition to all this, the Windsor Company, of Windsor, Vermont, are just completing an order for \$80,000 worth of milling and screw machines, to be shipped to Edinburgh, Scotland, to establish there a large factory for the manufacture of the highest degree improbable, and eminent physiologists who Singer sewing-machine. Not content with shipping the sew. have carefully investigated all the cases in which it is aling-machines themselves-of which large numbers of the leading kinds are constantly sent-they intend making them there, and that, too, with American machinery. Already, the Windsor Company has sent one or two lots of similar machivery to Canadjo for the same purpose; but sending ma. from that time down to the year 1847, when the last alleged chinery from here to Great Britain is bearding the lion in his case occurred, some fifty instances are recorded. Liebig made den to some purpose. It is also specially worthy of note an analysis of all these cases in 1851, and found that they nearly that the milling machine-one of the most important and all agree in the following points: useful of all metal-working machines-and the screw-making machine are purely of American origin.

### Steam Boiler Incrustations.

pose, and continued for a sufficient length of time to yield a 5. No one of the physicians who collected the cases, or at-

made. Refuse leather-cuttings from the tanneries will answer the purpose equally well.

# These prescriptions for a bad complaint are not new, unless

### The Maddening Mechanism of Thought.

peremptory monosyllable, and the restless machine is shiv- more enlightened day.-Boston Journal of Chemistry. ered as a case that is dashed upon a marble floor? Under that building which we pass every day there are strong dungeons, where neither hook, nor bar, nor bed cord, nor drinking vessel from which a sharp fragment may be shattered, shall by any chance be seen. There is nothing for it, when the brain is on fire with the whirling of its wheels, but to spring against the stone wall and silence them with one would really contrive some kind of a lever that one could check them, or alter their rate of going, what would the world give for the discovery? Men are very apt to try to get at the brakes by means of opium, they change the maddening monotony of the rhythm by means of fermented liquors. It is because the brain is locked up and we cannot touch its moveany crevice by which they may reach the interior, alter its

# Spontaneous Combustion of the Human Body.

In a former number, we spoke of the belief in the spontaneous combustion of the human body as "a vulgar superstition." A correspondent calls our attention to articles in

We must, in the first place, carefully distinguish between the notion of "a preternatural combinitiality" of the body under certain abnormal conditions, and that of its spontaneous combustion. The former is not impossible; indeed. The iormetric is not impossible; indeed, bere are tolerably "well authenticated instances" of the trind. The latter, if not absolutely inconceivable, is in the lightest degree improbable, and eminent physiologists who have carefully investigated all the cases in which it is alleged a doubt.
The earliest case of the kind which has a semblance of totherity to sustain it, is said to have happened in 1725, and from that time down to the year 1847, when the last alleged case occurred, some fifty instances are recorded. Liebig made
The order of the set of there are tolerably "well authenticated instances" of the kind. The latter, if not absolutely inconceivable, is in the leged to have occurred, do not find a single one established beyond a doubt.

authority to sustain it, is said to have happened in 1725, and

1. They took place in winter. 2. The victims were hard drinkers, and were drunk at the time. 3. They happened where the rooms were heated with fires in open fire-places or  $\frac{197,493}{107,493}$ .—WIND WHEEL—Leonard Fischer, Sonora, Cal. pans of glowing charcoal. Cases where rooms are heated by  $\frac{197,493}{107,493}$ .—FRUIT BOX.—J. H. Fisher, Chicago, III. that no one has ever been present during the combustion. No one of the physicians who collected the cases, or atpet to explain them, has ever observed the process, or rtained what preceded the combustion of the physicians of the physicians (197,494.—MACHINE FOR POLISHING STONE.—Calvin H. Fitch, 97,495.—DEODORIZING APPARATUS FOR WATER CLOSETS.— 97,496.—LIGHTNING ROD AND CONDUCTOR.—Theodotus Gar-lick, Cleveland, Onio. means of closed stoves are exceedingly rare. 4. It is admit-According to Cosmos a series of experiments, made on pur. ted that no one has ever been present during the combustion.

probably never spontaneous. Dr. Marc has suggested that inflammablegases, and possibly even phosphoreted hydrogen, which, under certain circumstances, inflames on contact with the air, may be generated in the living body, and may thus give rise to its spontaneous combustion; but this is merely a theory to account for such cases of combustion, if they have occurred.

On the whole, this idea of spontaneous combustion appears to be one of those old medical delusions which, having once Our brains are seventy-year clocks. The Angel of Life gained a sort of credence, are not readily given up. It is easy winds them up once for all, then closes the case, and gives  $|t_0$  see, as Liebig observes, that it arose at a time when men the key into the hand of the Angel of the Resurrection. Tic- entertained entirely false views on the subject of combustion, tac! tic-tac! go the wheels of thought; our will cannot stop its essence, and its cause. It is only since the time of Davy, them; they cannot stop themselves; sleep cannot still them; or for about half a century, that combustion has come to be into the case, and seizing the ever-swinging pendulum, which their heads that the body might take fire of itself, it is not we call the heart, silence at last the clicking of the terrible singular that when a man happened to be burned up, the escapement we have carried so long beneath our wrinkled case was explained in that way if it could not readily be acand image after image jarring through the over-tired organ ! terious "incendiary." Then again, other things being equal, Will nobody block those wheels, uncouple that pinion, cut the more marvelous explanation of strange phenomena is the string that holds these weights, blow up the infernal ma- usually the more popular one. The Latin proverb omni igsometimes for silence and rest-that this dreadful mechanism, *ifico est*, with everybody, whatever is unknown passes for a holiday? Who can wonder that men swing themselves off the scientific knowledge of the age in which it had its origin from beams in hempen lassos ?- that they jump off from para- and which consequently came to be accepted by the scientific pets into the swift and gurgling waters beneath ?- that they men of the time, should still live as a popular superstition take counsel of the grim fiend who has but to utter his one and even find an occasional defender among the savans of this

## Official List of Latents.

### Issued by the United States Patent Office. FOR THE WEEK ENDING DEC. 7, 1869.

Reported Officially for the Scientific American


	SCHEDULE OF PATENT OFFICE FEES:	
l	On each caveat	610
	On filing each application for a Patent (seventeen years)	615
	On issning each original Patent.	820
	On appeal to Commissioner of Patents	620
	On application for Reissue	630
	On application for Extension of Patent In granting the Extension	650
	on granting the Extension.	850
	On filing a Disclaimer	610
	•n an application for Design (three and a half years)	810
	On an application for Design (seven years)	81ð
	On an application for Design (fourteen years)	130
Į	In addition to which there are some small revenue-stamp taxes. Resider	ats
	of Canada and Nova Scotia pay \$500 on application.	

- 97,470.-LUBRICATOR.-David Adamson, New York city.
- 97,471.—BALING PRESS.—J. L. Albertson, New London, Conn. Antedated Nov. 25, 1869. 97,472.—SAFETY VALVE.—Henry Ashfield. Chicago, Ill.
- 97.473.—STEAM GENERATOR SMOKE STACK.—W. F. Beecher, Morristown, N. Y. Antedated Nov. 24, 1869. 97,474.—SNOW PLOW.—Gottlieb Beer, Grafton, Wis.

- 97,474.—SNOW PLOW.—Gottlieb Beer, Grafton, Wis.
  97,475.—CONSTRUCTION OF PRESERVING-HOUSES.—Harrison Blackburn, Bedford county, Pa. Antedated, Nov. 20, 1869.
  97,476.—PLANING MACHINE.—J. B. Brown (assignor to himself and N. F. Libby), Lowell, Mass.
  97,477.—STOVE GRATE.—Edward Card, Pawtucket, R. I.
  97,478.—BOT JACK.—Wheeler Case, Russia, assignor to himself and J. H. Read, Jr., Utica, N. Y. Antedated Nov. 21, 1869.
  97,479.—BUGGY TOP.—A. M. Cory, New Providence, N. J. Intedated Nov. 23, 1860.
  97,479.—PUSHING JACK FOR RAILROAD CARS.—R. A. Cowell (assignor to himself and E. N. Keys), Cleveland, Ohio.

- 07,488.—ORE CONCENTRATOR AND SEPARATOR.—James Ed-
- or, 201, - Levarter, - vinnam Fason (assignor to E. H. J. croft), Boston, Mass. 97,490. - SULKY PLOW. - C. A. Edwards, Chatfield, Minn. 97,491. - SAW SET. - A. R. Fenner, Cold Brook, N. Y.

- 97,494.-MACHINE FOR POLISHING STONE.-Calvin H. Fitch,

reliable result, has fully proved that the addition to the feed	temp
water of steam boilers of fatty clays, especially the kind	ascer
known as fuller's earth, entirely prevents boiler incrustations,	kn∙v
even where, of necessity, very hard water has to be used as	the c
feed water. A loose, soft mud is deposited as soon as the mo-	found
tion of the water, due to the boiling, ceases on cooling. This	Ou
mud readily runs off on opening the sludge valve of the	there
boiler.	tion

when the fires were extinguished, the denosit was removed found to be combustible. 

pted to explain them, has ever observed the process, or <sup>1,1,0,0</sup>, Cleveland, Ohlo. rtained what preceded the combustion. 6. No one has <sup>97,497.—PROCESS</sup> OF DYEING BLACK.—James Gee, West New won how much time had elapsed from the beginning of <sup>97,493.</sup>—LATCH.—Rudolph Geselbracht and Frederick Frey, combustion to the moment when the consumed body was

it of forty-five cases collected by Frank, of Berlin, in 1843, e are only three in which it is assumed that the combusoccurred when there was no fire in the neighborhood The Annales de Genie Civil informs us that these incrusta- and Liebig clearly shows that these three cases are tota' y 97,503-COAL ASH SIFTER.-Abram Hagadorn, Canajoharie, tions may be prevented by the use of raw potatoes, which unworthy of belief. The conclusion to which he com is 97,504.—DITCHING MACHINE.—H. L. Hall, Buffalo, N. Y. cause all solid matters to be precipitated at the bottom of the that "spontaneous combustion in a living body is *absolutely* 97,505.—ELECTRO-MAGNETIC RAILROAD SIGNAL.—T. S. Hall, boiler in a fine powder, leaving the sides perfectly free. 'The *impossible*.'' Flesh which has been saturated with alcohol for bridge Company, New Haven, Conn. experiment was tried with an engine of 8-horse power, into a great length of time, as anatomatical preparations, is not the boiler of which ten kilogrammes of potatoes per week combustible; if ignited, the alcohol burns off, scarcely char-were introduced through the safety valve. Every week. ring the flesh. The corpses of drunkards have never been when the fires were extinguished the densit was removed found to be combustible.

M. Duvergie has opposed Liebig's views, and has expressed ance of the plates was blackish and slightly greasy, and the absorption of alcohol, or from its conversion into more in- Hoyt, Hebron, N. H. BULLET MACHINE.-E. A. Hyde, Ann Arporners of the joints were in the same state as when first flammable compounds; by he addits that the combustion is

97,495.—BORING MACHINE.—F. M. Gibson, Chelsea, Mass.
 97,500.—GANG PLOW.—D. H. Gleeson (assignor to himself and Denis Cannon), San Leandro, Cal.
 501.—WELL AUGER.—J. Y. Goode, Water Valloy, Miss.

-SASH Holder.-A. F. Gregory and C. H. Ensign, Bridgeport, Conn

Sumter, S. C. 57,599.—STRAM GENERATOR SMOKE STACKS.—William Hold.

bor, Mich

- burgh, N. Y. Antedated Dec. 4, 1869. 97,516. CHAMBER PAIL.—J. S. Jonnings, Brooklyn, N. Y

- 97,520.—SHAKER FOR THRASHING MACHINES.—M. A. Keller, 97,605.—FOLDING CHICKEN COOP.—George Edward Cleeton, Littlest
- 97,521.—Spring Bed.—S. P. Kittle, Newark, N. J.
- 97,522.-FOLDING BOX SPRING MATTRESS.-Sam. P. Kittle,
- 97,522.—FOLDING DOA GERING SATETALL. Brooklyn, N. Y. 97,523.—COMBINED SHOVEL AND TONGS.—Henry Kliperd and Benjamin Newbury, Clarksville, Ohio. Antedated Nov. 30, 1869. 97,524.—MODE OF ATTACHING SEATS TO CARRIAGES.—Chas.

- Krebs, West Springfeld, Mass. 97,525.—ATTACHING CALKS TO HORSESHOES.—Perley Laffin, Warren, assignor to himself and Z. E. Cary, West Brookfeld, Mass. 97,526.—KNITTING MACHINE NEEDLE.—J. H. Lane and C. D. 97,526.
- 97,020.—INNITTING MACHINE INESSES. C. I. L. HOUSE, HOUSE, Lake Village, N. H. 97,527.—MACHINE FOR DRILLING AND PREPARING WATCH
- CASES FOR SPRINGING.-JACques Laurent, New York city. 97,528.—MODE OF PREPARING PAPER FOR PRINTING POST-AGE AND REVENUE STAMPS.-Samuel Lenher and H. H. Spencer, Phila-delphia, Pa.
- 97,529.—BASE BURNING STOVE.—G. W. Lewin, Worcester,
- 97,530.—BRODCAST SEEDER.—J. S. Lewis, Elkport, Iowa
- 97,531.—GRAIN BINDER.—S. D. Locke, Janesville, Wis.
- 97,532.—GRAIN BINDER.—S. D. Locke, Janesville, Wis. 97,533.—GRAIN BINDER.—S. D. Locke, Janesville, Wis.
- 97,534.—GRAIN BINDER.—S. D. Locke, Janesville, Wis. 97,535.—GRAIN BINDER.—S. D. Locke, Janesville, Wis. 97,536.—GRAIN BINDER.—S. D. Locke, Janesville, Wis.

- 97,537.—METALIC CARTRIDGE.—John Logan and D. W. Ediredge, Boston, Mass.
  97,538.—PORTABLE FENCE.—Arthur Love, Saxonburg, Pa. Antedated Nov.22,1869.
  97,538.—SA WING MACHINE.—Patrick Magee (assignor to Felix Thibodaux). Assumption parish, I.a.
  97,540.—COOLER FOR BEER AND OTHER LIQUIDS.—John J. Märki, Richmond, Ind.
  97,541.—MACHINE FOR WIRING BLIND RODS AND SLATS.—Goding Meyer (assignor to himself and Jacob Wagner), Cleveland and Data Santa Santa

- 97,543.—Combined Hay Rake and Tedder.—John C. Mills, Palmyra, N. Y. 97,544.—TUCK-CREASER FOR SEWING MACHINE.—John H.

- 97,544.—TUCK-CREASER FOR SEWING MACHINE.—John H. Mooney, San Francisco. Cal.
  97,545.—FOLDING BEDSTEAD.—John Muller, Philadelphia, Pa.
  97,546.—ROTART STEAM ENGINE.—H. Olney (assignor to himself, Robert A. Delong, and Lucius R. Townsend). Malone, N.Y.
  97,547.—SHEET-METAL KEY.—Emery Parker, New Britain,
- 97.548. -WINDOW AND DOOR CAP MOLDING.-Joseph Parkin
- and James H. Smith, Cleveland, Ohio. 97,549.—DEVICE FOR FORMING BOILERS.—George S. Pierce,
- 97,559.—DEVICE FOR FORMING DULIERS.—George 5. 1 1010, Wilkesbarre, Pa.
  97,550.—PERMUTATION LOCK.—Oliver E. Pillard (assignor to Prederick II. North), New Britain. Conn.
  97,551.—MACHINERY FOR MAKING PIANO-FORTE CASES.—Sawyer Porter (assignor to himself and Levi W. Porter), Leominster Year
- Mass. 97,552.—RAILWAY CAR WHEEL AND AXLE.—Perley Putnam. Laconia, N
- aconia, N.H. 53.—MACHINE FOR PREPARING PAVING BLOCKS.—Wm. Robbins and Charles W. Stafford, New York city. Antedated No-ember 30, 1869. 97,553.
- Vender 30, 1893. 97,554.—MACHINERY FOR PREPARING WOODEN BLOCKS FOR PAVEMENT.—William O. Robbins and Charles W. Stafford, New York
- 97,555.—Compound for Destroying Insects.—N. T. P.
- 97,555.—COMPOUND FOR DESTRUTING INSECTS.—N. I. F. Robertson and Thomas Niles, Fairbury, Ill.
  97,556.—HARVESTER.—A. Sheline and E. Burke, Edon, Ohio.
  97,557.—SUSPENDERS.—Abraham Shenfield, New York city.
  97,558.—BOOT CONFORMATOR.—Samuel W. Shorey, Gales.
- 97,559,—COMBINED UMBRELLA AND CANE.—Addison Smith, Perrssburg, Ohio. 97,556.—SAFETY LAMP.—Cyrus Smith, Hermon, Me.
- 97,561.-MANUFACTURE OF CARTRIDGE SHELLS. Dexter
- 97,643.—FASTENING FOR CONSELL LIGHT, York City. York City. 97,644.—COFFEE ROASTER.—John Jay, Jonesborough, Ind. 97,645.—CAR SPRING.—C. T. Jeffries, Philadelphia, Pa. 97,646.—GANG PLOW.—Byron Jennings (assignor to himself and Henry W. Briggs), Gilroy, Cal. Antetated Dec. 1, 1869. 97,647.—ARTIFICIAL LEG.—S. B. Jewett, Laconia, N. H. 97,648.—SASH BALANCE.—Chas. Kanzler and Albert Nega, St. Jonis, Mo. Smith Springfield, Mass. 97,562.—GARMENT SUSPENDER. - E. N. Snow, Chicopee,
- 97,563.—TRACK-CLEANER FOR MOWING MACHINE.—Pratt A. Spicer, Marshall, Mich. 97,564.—PISTON PACKING.—Edward Sullivan, Pittsburgh, Pa.
- 97,545.-CHURNING MACHINE.-D. G. Taylor, Campbells-
- 97,566.—EXPLOSIVE COMPOUND FOR USE IN FIREARMS,
- 57,500.—EAPLOSIVE COMPOUND FOR USE IN FIREARMS, BLASTING, ETC.—Thomas Taylor, Washington, D. C.
  97,568.—COMBINATION PADLOCK.—M. P. Thatcher, Pontiac, assignor to Julius; A. Foster, Atrian, Mich.
  97,569.—CHECK HOOK.—George Theobalt, Springfield, Mass.
  97,570.—VENTILATOR.—WIM. F. Thoms, New York city.
  97,571.—UNTRUMENT, FOR DESCRIPTING SPIEAU LANDS
- 97,571.—VENTILATOR.—VIII. F. THOMS, New TOK COV.
  97,571.—INSTRUMENT FOR DESCRIBING SPIRAL LINES. Lewis W. Truesdell, Owego, N. Y. Antedated November 30, 1869.
  97,572.—TRUNK HASP.—Cornelius Walsh, Newark, N. J.
  97,573.—CULTIVATOR.—Hiram J. Wattles, Rockford, Ill.
  97,574.—SURCINGLE.—Martin Wesson, Springfield, Mass.

- 97,575.—SHAFT COUPLING.—Steht Wheeler, Albany, N. Y. 97,576.—VENTILATOR.—Charles F. Whorf, St. Leuis, Mo. 97,577.—Rallway TRACK CLEANER.—M. F. Wickersham,
- Springfie'd, III. 97,578 TRACE-LOCK FOR WHIFFLETREE.—Samuel P. Wil-
- liams, Rutland, Vt. 579.—SEAT FOR CHAIRS, SOFAS, ETC.—Frederick Wittram, 97.579.-
- Springs, N.Y. 97,661.—SLED BRAKE.—C. M. Lutkin, Alstead, N. H. 97,662.—COCKEYE FOR HARNESS. Thomas J. Magruder,
- Son Francisco, Cal.
   97,580.—GENERATING HYDROGEN AND HYDROCARBON GAS. —Joseph S. Wood (assignor to hiuself and John J. Carberry), Philadel-phia, Fa.
   97,581.—LOCK.—Thomas B. Worrell and Thomas Walker, Philadelphia, Pa., assignors to Thomas B. Worrell. ra. -LOCK.—Thomas B. Worrell and Thomas Walker, delphia, Pa., assignors to Thomas B. Worrell
- to Th

97,513. - ALARM LOCK.-B. F. Irvine and T. A. Hitchcock, North La Crosse, Wis. Antedated Nov. 27, 1869. 97,514.-WINDOW BLIND.-A. A. Jaqua (assignor to himself 97,598.-DUMPING WAGON.-J. G. Burwell and J. J. Walls, and David Parker), New York city. 97,515.-SADIRON HEATER.-James Jenkinson, burgh N. V. Antedated Dec. 1, 1869. 97,600.-APPARATUS FOR DRESSING FLOUR.-Henri Cabanes, burgh N. V. Antedated Dec. 1, 1869. 97,682.-MACHINE FOR WASHING WOOL.-Emile Nougaret, Newark, N. J. Antedated Dec. 1, 1869. 97,682.-WELOCIDE -Reme Olivier, Paris France. 97,682.-WELOCIDE -Reme Olivier, Paris France. 97,681.—INTERCHANGEABLE BOOT AND SHOE HEEL.—John Norburn, Pittsburgh, Pa., assignor to J. C. Woodhead and J. Holmes, trustees for Universal Manufacturing Co.
97,682.—MACHINE FOR WASHING WOOL.—Emile Nougaret, Newark, N. J. Antedated Dec. 1, 1869.
97,683.—VELOCIPEDE.—Rene Olivier, Paris, France.
97,684.—CENTRIFUGAL MACHINE FOR EXTRACTING HONEY PROM THE COME.—H. O. Peabody, Boston, Mass.
97,685.—SPRING.—Wm. Pearson, Windsor Locks, Conn.
97,685. BLUNGWIDTE ACCOUNT A W. DOWN, St. Locoble Mo.

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97,686.—PIANOFORTE ACTION.—A. W. Perry, St. Jeseph, Mo 97,687.—FEED CUTTER.—Hans Peterson, Red Wing, Minn.

97,688.—APPARATUS FOR CLEANING BARHELS.—Immanuel Pfeiffer (assignor, for one half, to H. M. Braem), New York etty.
97,689.—VENTILATOR.—W. L. Phillips, Normal, Ill.
97,600.—DRAFT REGULATOR FOR PLOWS.—Martin Prillaman (assignor to himself and Elizabeth Ressler), Throa, Ind.
97,691.—MACHINE FOR SWAGING THREADS ON SCREWS.— T. T. Prosser, Cherago, Ill.

T. T. Prosser, Chicago, Ill. 97,692.— MANUFACTURE OF SOAP.—Wm. P. Pugh, High

97,692.— MANUFACTURE OF SOAP.—Wm. P. Pugh, High Point, N.C.
97,693.—GUN HARPOON.—J. P. Rechten, New York city.
97,694.—PRIVX SEAT.—Frank Reed, Fitchburg, Mass. Antedated Nov.30, 1859.
97,695.—PISTON VALVE.—A. F. Reeder, Normal, Ind.
97,696.—TUBULAR REFRIGERATOR.—Adam Reid, Buffalo N.Y.

97,700.-MACHINE FOR MAKING BUCKLES.-Julius Robbins,

97,700.—MACHINE FOR MAKING BUCKLES.—Julius Robbins, Auburn, N. Y.
97,701.—KNIFE SHARPENER.—Z. C. Robbins and H. A. Robbins, Washington, D. C.
97,702.—TOBACCO ELEVATOR.—G. Robinson, Louisville, Ky.
97,703.—MACHINE FOR ROLLING, PRESSING, AND CUTTING TOBACCO.—G. Robinson, Louisville, Ky.
97,704.—TRACE BUCKLE.—Wm. A. Rebinson, Grand Rapids, Mich., assignor to O. B. North & Co.
97,705.—COIL SPRING AND ITS ATTACHMENTS.—Timothy Rose, Cortland, and P. S. Buell, Windsor, N. Y.
97.706.—FRING BED BOTTOM.—Ira M. Russell, Lewiston, Mich.

97,707.- APPARATUS FOR LAYING OU'L STAIR RAILS .- A.

97,713.-KEY GUARD.-P. G. Smith (assignor to himself and

97,716.-BOOT AND SHOE CLEANER.-W. H. Smith, Newport, 97,717.—SIGHT FOR FIREARMS.—C. E. Sneider, Baltimore,

Md. 97,718.—MANUFACTURE OF IRON AND STEEL.—H. Spencer

and L. R. Saylor, Philadelphia, Pa. 97,719.—Toy HARPOON GUN.—Ebenezer Sperry, St. Louis,

97,720.—Spring BED BOTTOM.—Jest Stengel, Creton, Mich. 97,721.—PLEATING MACHINE. — Simon Sterns, New York

etty. 97,722.—BEDSTEAD FASTENING.—William Stevens, Tarentum,

97,723.-TOOL REST FOR LATHES.-J. G. Stowe, Providence,

97,725.-WASHING MACHINE.-T. H. Tatlow, Jr., Newark, 97,726.—HANGING WINDOW SHADES.—J. I. Tay, Oakland,

97,727.-MEANS FOR HANGING WINDOW SHADES.-J. I. Tay and L. L. Sawyer, Oakland, Cal. 97,728.—BREAD SLICER.—Joseph Taylor, Hudson, N. J. 97,729.—GRAIN DRILL.—J. H. Thomas and P. P. Mast, Spring-

97,730.—RAJLWAY CAR BRAKE.—J. B. Van Dyne, Nashville, Tenn. Autedated Nov. 30, 1869. 97,731.—COOKING STOVE.—Nicholas S. Vedder, Troy, N. Y. Antedated Nov. 30, 1869. 97,732.—COAL STOVE.—S. D. Vose, Milwaukee, Wis.

197,732.—COAL STOVE.—S. D. Vose, Milwaukee, Wis.
197,733.—FASTENING FOR TRAVELING BAG.—C. Walsh and Josiah Walsh, Newark, N. J., assignors to C. Walsh.
197,734.—BREECH-LOADING FIREARM.—Wm. G. Ward, New York etty.
197,735.—PEN.—Addison G. Waterhouse, San Francisco, Cal. Antedated Nov. 25, 1869.
197,736.—CLOTHES DRYER FOR STOVE PIPES.—L. B. Waterman (assignor to L. B. Kelly), Chicago, Ill.
197,737.—BULER FERD AND WATER HEATER.—H. Wickley.

97,739.—CORN PLANTER.—F. L. Wilkens, St. Mary's, Ohio. Antedated Dec. 4, 1869.
97.741.

Antedated Dec. 4, 1869. 97,740.—TIRE HEATER.—Isaiah M. Williams, Clinton county,

97,741.—MECHANISM FOR DRIVING SEWING MACHINES.—J.H. Wilson, Philadelphia, Pa., and J. C. Outwater, Newark, N. J. 97,742.—MOLE KILLER.—Joseph Wilson, Little Falls, N. J. 97,743.—CIDER MILL.—Levi Wilson, Springfield, Ohio. 97,744.—APPARATUS FOR TREATING DISEASES BY MECHANI-

CAL MOVEMENT. -A. L. Wood. New York City. 97,745.-GATE.-J. A. Wood and E. V. Marbaker, Crosswicks,

97,747.—GAME TRAP.—E. M. Day, Elkhart, III, 97,748.—GAS MACHINE.—T. G. Springer, Clinton, Iewa. 97,749.—MACHINE FOR MAKING CANDLE MOLDS.—Moses Burlingame, Garrattsville, N. Y., assignor to himself and J. E. Piłking-ton, Washirgton, D. C.

97,746.—PLOW.—Alex. Wright, Allegheny City, Pa. 97,746.—PLOW.—Alex. Wright, Allegheny City, Pa.

97,724.—HAY LOADEN.—W. H. Straub, Danville, Pa.

field. Ohio

Robert Donahne), Brooklyn, N. Y. 97,714.—BRIDGE.—R. W. Smith, Toledo, Ohio. 97,715.—HAMMER.—S. B. Smith, New Haven, Conn.

- 97,600.—APPARATUS FOR DRESSING FLOUR.—Henri Cabanes, Bordeaux, France. 97,601.—RAILROAD TICKET.—C. A. Chamberlin, Pittsburgh,
- burgn, N. 1. Antesater Dec. 4, 1005.
  97,516. CHAMBER PAIL. J. S. Jonnings, Brooklyn, N. Y.
  97,517. GAS BURNER. W. L. Jukes (assignor to himself, F. 97,602. DEVICE FOR TURNING LOGS IN SAW MILL. Bela L. Ohurchilland George Z. Vanderslice, Philipsburg, Pa.
  97,518. SEWING MACHINE FOR SEWING SHOES. Jeremiah Keith, Brooklyn, N. Y.
  97,519. DETACHABLE TIPPING BAIL. J. Keith, Brooklyn, N. Y.
  97,519. DETACHABLE TIPPING BAIL. J. Keith, Brooklyn, N. Y.
  97,503. WOODEN TRUNK. D. J. Clark, W. F. Doggett, and S. M. Burr, Columbus, Ohio.
  97,604. DISH-WASHER. Frances E. Clarke (assignor to Thos. N. Y.
  97,605. ECOLUME C. MICKEN COOP. George Edward Cleeton, N. Y.

  - 97,606.—DITCHING MACHINE. William Cline, Jr., Clayton,
  - 97,607.—PROCESS FOR DECORATIVE OIL PAINTING.—Paul
  - Cousin and Plerre Oury, Paris, France, assignors, for one third, to N. Washaner, New York city. 97,608.—RAILWAY CAR.—Walworth D. Crane, New York
  - 97,609.—PLOW.—Charles Crow (assignor to himself and Wil-

  - 197,609.—PLOW.—Charles Crow (assignor to nimsen and with the dispersive for the state of the state o

  - 57,615.—APPARATUS FOR IREATING CROOP AND OTHER DIS-EASES.—GHDERI DECLAP, PARIS, France.
     97,614.—MACHINE FOR IRONING AND STIFFENING LINEN AND OTHER FABRICS.—Jules Decoudum, Paris, France. Patented in France, May 16, 1865.
     97,615.—METALLIC CARTRIDGE.—A. C. Depew and J. Slatch-er, Brügenort. Conn.

  - er, Bridgeport, Conn. 197,616.—TOBACCO MACHINE. J. H. Dickason, Hannibal,
  - 97,617.—Combined Call Bell and Table Caster.—H. A

  - 97,617.—COMBINED CALL BELL AND TABLE CASTER.—H. A. Dierkes, New York City.
    97,918.—CARRIAGE JACK.—W. S. Douglass (assignor to W. O. Douglass and A. S. Douglass), Richmond, Vt.
    97,619.—BEDSTEAD.—D. E. Dugan, Springville, Pa.
    97,620.—CAR COUPLING.—Joseph Dunott (assignor to himself and Geo, Gibson), Philadelphia, Pa.
    97,621.—SAWING MACHINE.—Samuel Fletcher, Hollis, N. H.
    97,622.—AXLE FOR CARRIAGES.— Samuel Forrester, Allegheny, Pa.
    97,623.—CARRIAGE AXLE.—Samuel Forrester, Allegheny, Pa.
    97,623.—CARRIAGE AXLE.—Samuel Forrester, Allegheny, Pa.
    97,623.—KNIFE HANDLE.—Lamos D. Erory, Nav. Briter, Sander Barter, Sanger Barter, Sanger Barter, Sanger Barter, Sanger Barter, Sanger Barter, Sanger Sang

  - 97,707.—APPARATUS FOR LAYING OUT STAIR RAILS.—A. Schollars, Leavenworth, Kansas.
    97,908.—HORSE HAY RAKE.—Wm. Sharkey, Chice, Cal.
    97,709.—PROCESS FOR MANUFACTURING CHEESE.—Mary A. Sheaffer, Elizabethtown, Pa.
    97,710.—BOOK HOLDER.—Hamilton Sherman, Waverly, Pa.
    97,711.—PLATE FOR HOLDING THE LIDS OF TRUNKS IN PLACE.—J. W. Shubert and Norval Douglas, New Haven, Conn.
    97,712.—VIEES FOR WOOD WORKING.—J. Simpson, Cleveland, Onio. 97,624.—KNIFE HANDLE. — James D. Frary, New Britain,
- 97,542.—GARDEN IMPLEMENT.—Henry Miller, Roadside, Va. 97,625.—MACHINE FOR JOINTING STAVES.—L. R. Fulda and
  - Martin Fulda, San Francisco, Cal. 97,626.—SAWING MACHINE. Samuel A. Gardner, Round
  - Hill, Pa. 97,627.—GAS-BURNER REGULATOR.—Robert Gill, New York
  - 97,628.—CORRUGATED REFLECTOR.—Bernard Goetz, Phila-
  - 97,629.—ATTACHMENT FOR FASTENING OVERLAPPING PARTS of GARMENTS.—B. J. Greeley, Boston, Mass. 97,630.—POTATO DIGGER.—Wm. Green, Holly, Mich. Ante-
  - dated Nov. 27, 1869. 97,631.—COTTON AND HAY PRESS.—Robert Greene, Green-
  - ville, N. C. 97,632.—MODE OF GENERATING ILLUMINATING GAS.—Alex-97,632.—MODE OF OENERATING TELEWINATING GAS.—Alex-ander Hamar, Philadelphia, Pa. 97,633.—PUMP.—Michael Hanstine, Waynerborough, Pa. 97,634.—PORTABLE FURNACE.—John H. Harper, Pitts-

  - burgh, Pa. 97,635.—GRAPPLING HOOK. Henry H. Hatheway, Clock.
  - ville, N.Y. 97,636.—SPARK ARRESTER.—W. E. Hayes, Durand, Wis. 97,637.—FASTENING FOR NECKTIE.—Harry M. Heineman, San
  - rancise Prancisco, Cal. 97,638.—MACHINE FOR TRIMMING THE HEELS OF BOOTS AND SHOES.—C. H. Helms, Poughkeepsie, N. Y. 97,639.—WATER CLOSET.—J. B. Hobson and J. Middleton, Jr.,
  - n Francisco, Cal. San Francisco, Cal. 97,640.—SAW MILL.—J. R. Hoffman, Fort Wayne, Ind. 97,641.—SADIRON HOLDER.—Egmont Inger, New York city. 97,642.—BRICK MOLDS.—Stephen Inman, Rockford, Ill. 97,643.—FASTENING FOR CORSETS.—Ludwig Jarchow, New York Otta

Louis, Mo. 97,649.—STAY FOR TRUNKS.—Chas. Kellermann and P. W. Stanf, Chicago, III. 97,650.—GRAIN DRYER.—S. C. Kenaga, Kankakee, III. Ante-dated Nov. 27, 1869. 97,651.—OILING CARRIAGE AND CAR AXLES.—Wm. Kenwor-

97,601.—Olithe Clanker of the Property of the Action of the Act

England.
 97,654.—ATTACHING KNOBS TO DOORS.—Chas. F. Langford, Brooklyn, N. Y.
 97,655.—CENTRIFUGAL PUMP. — N. H. Lebby, Charleston,

97,656.-TOOL HOLDER FOR GRINDSTONES.-Philip Leonard,

Mass. 97,659.—ARTIFICIAL NIPPLE. — H. D. Lockwood, Charles-

town, Mass. 97,660.—Cooking Stove.—Zephaniah Lockwood, Saratoga

97,580.—GENERATING HYDROGEN AND HYDROCARBON GAS.	97,662.—Cockeye for Harness. — Thomas J. Magruder,	Burlingame, Garrattsville, N. Y., assignor to himself and J. E. Pilking-
-Joseph S. Wood (assignor to himself and John J. Carberry), Philadel- nhia, Pa.	Marion, Ohio. 97,663.—BUSH HAMMER.—J. W. Maloy, Boston, Mass.	ton, Washii gton, D. C. 97,750.—HOOP SKIRT.—Gottfried Biering, New York city.
97,581.—Lock.—Thomas B. Worrell and Thomas Walker,	97,664.—MACHINE FOR GRINDING NEEDLES.—Clark Marsh	
Philadelphia, Pa., assignors to Thomas B. Worrell.	(assignor to Wheeler & Wilson Manufacturing Company). Bridge-	REISSUES.
97,582.—MANUFACTURE OF STEEL.—John Amsterdam, New	port, Conn. 97,665,—WATER WHEEL.—H. P. McCleave, Tomales, Cal.	89,669.—FEED-CUTTING ATTACHMENT TO THRASHING MA
York city. 97 583 - DANKING CUP - Bernhard Adler (assignments himselt		CHINESDated May 4, 1869; reissue 3,756G. W. Lee, Sandy, Ohio.
and W. N. Drescher), New York city.	Antedated Dec. 4, 1869.	24,772.—Powder Keg.—Dated July 12, 1859; reissue 1,383,
97,584.—GRAIN SEPARATOR.—J. R. Allen, Edinburg, Ind.	97,667.—CUTTER FOR CARD-SETTING MACHINE.—D. McFar-	Henry Du Pont, E. I. Du Pont, L. Du Pont, and Eugene Du Pont, Wil-
Antedated November 27, 1869.	land Worcester Mass	dated January 6, 1863; reissue 3,757.—Charles Green, Win. Wilson, Jr., Henry Du Pont, E. I. Du Pont, L. Da Pent, and Eugene Du Pont, Wil- mington, Del., and Charles Pratt, New York city, assignees of James Wilson, Charles Green, and Wm. Wilson, Jr.
East Boston, Mass.	97,668.—DRAIN-PIPE MACHINE.—Peter McIntyre, Norwich, Conn.	96,278.—BRIDGE.—Dated Oct. 26, 1869; reissue 3,758.—Smith,
97,585.—DRIVING MECHANISM FOR SEWING MACHINES.—	97,669.—FRUIT CAN.—A. J. McMillen, Ravenswood, West Va.	Latrobe & Co Baltimore, Md., assignces of F. H. Smith.
James B. Ayer, Elizabeth, N. J.	97,670.—PUMP.—C. L. Merrill, Watertown, N. Y.	DESIGNS.
97,587.—HORSE COLLAR.—W. M. Baker, Greenwich Station,	97,671.—ABRADING AND POLISHING WHEEL.—E. C. Merrill,	
97,588.—FRUIT JAR.—Thomas J. Bargis and John C. Under-	Charleston, Vt.	3,779.—CLOCK CASE FRONT.—F. Kroeber, New York city.
wood, Richmond, Ind.	97,672.—PATTERN FOR LAYING OUT GARMENTS.—Wm. M. Michael, Indiana.Pa.	3,780.—PENDULUM-CLOCK CASE FRONT.—F. Kroeber, New York city.
97,589SPRING FOR HORSE COLLARSBenjamin J. Barton and Roswell J. Stanley, Washington, Iowa.	97,673MACHINE FOR OPERATING PUMPSR. E. Moore,	3.781.—Collar.—E. E. Mack, Albany, N. Y.
97,590.—Hollow Auger —H. T. Beam, Joseph C. Freeman,	Navasota, Texas.	3,782.—FLOOR OIL CLOTH PATTERN. — James Patterson,
and D. B. Mills, Palestine, Ill.	97,674.—CHURN.—Ezra Morgan, French Creek, N. Y.	Elizabeth, assignor to Richard H. Reeve and Benjamin C. Reeve, Cam- den, N. J.
97,591.—WATER WHEEL.—E. R. Beardsley, Aroma, Ill.	97,675.—CLAMP FOR EMBOSSING HARNESS LOOPS.—O. H. Mor- ris. New Haven. Conn.	3,783.—HARNESS BUCKLE. — D. Schoonmaker, Springfield,
97,592.—HORSE COLLAR.—A. Leckwith, New Orleans, La.	97,676.—PEN.—W. A. Morse, Philadelphia, Pa.	Mass.
97,593.—RAILWAY RAIL.—Henry Belfield, Philadelphia, Pa. 97,594.—ALARM FAUCET.—Thomas M. Biddle, Fort Wayne.	97,677.—HAY TEDDER.—M. D. Myers (assignor, of one fourth,	
Ind.	to G. W. Gates), Frankfort, N. Y.	NEW FUBLICATIONS.
97,595.—STEAM GAGE COCK. — Samuel Blackman, Reading,	97,678.—HEATING ATTACHMENT FOR COOKING STOVES.—R. W. Meyers (assignor to himself, Geo. Gardiner, Wm. Gardiner, and O. L.	
Pa.	Gardiner), Glen Gardner Station, N. J.	FOR CHRISTMASThe children must always have something to make
97,596.—MACHINE FOR PREPARING TOBACCO STEMS.—Nich-		them merry on Christmas. Messrs. Turner & Brother, 808 Chestnut street
olas H. Borgfelt, New York city.	IN LOOMS.—Archibald Nimmo (assignor to himself and Thomas Moran), Philadelphia, Pa.	Philadelphia, have issued a neat and and very pretty book called "Christ- mas Day," with three poems; viz.: "Twas Night Before Christmas," "Christ-
97,597.—PROCESS OF TREATING ASPHALTUM TO OBTAIN COLOBS AND DYES.—Julius Bronner and Hermann Gutzkow, Frankfort-		mas Day," with three poems, viz.: "I was Night Before Christmas," Christ- mas Day," and "The Night After Christmas," from Punch. It has a beau
on the Main, Prussia.	lyn, N. Y	tiful cover, and issent by mail for fifty cente.
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