

SUPPLEMENT SECOND

f VICTORIA

GOVERNMENT GAZETT

OF FRIDAY, MARCH 20, 1891.

Bublished by Authority.

No. 34.1

TUESDAY, MARCH 24.

[1891.

OFFICIAL LIST OF PATENTS.

OFFICIAL List of Applications for Patents Lodged; Applications Accepted, Refused, Abandoned, and Opposed; Complete Specifications Accepted; and Letters Patent Sealed. From the 1st to the 28th days of February, 1891, in the Patents Office.

THOS. PROUT WEBB,

APPLICATIONS FOR PATENTS.

No. 8475. By Henry Dalton, of Gourlay-street, Balaclava, Victoria, plumber, for "Raising sunken vessels or ships." 2nd February.

No. 8476. By Robert Bowman, of Nos. 58 and 60 King-street, Melbourne, in the colony of Victoria, merchant, for "Improvements in the fire grates of locomotive and other boilers." 3rd February.

No. 8477. By George Simpson, a member of the firm of George Simpson and Co., of Warracknabeal, in the colony of Victoria, implement manufacturers, for "An improved rising beam for jump ploughs." '3rd February.

No. 8478. By William John Jessup, of Kaniva, in the colony of Victoria, machinist, for "An improved threshing machine." 3rd February.

No. 8479. By John Trevor-Jones, of Sydney, in the colony of New South Wales, civil engineer, for "Improved appliances for preventing noxious matter from gaining access to water mains through ball hydrants."

4th February.

No. 8480. By William Goodenough Percy Sharp, of No. 44 Lewisham-road, Windsor, near Melbourne, in the colony of Victoria, gentleman, for "Improvements in paper bags, principally applicable to those which are used for carrying small quantities of fruit." 5th February.

No. 8481. By Joseph Senior Sheard, of Numurkah, in the colony of Victoria, mechanical engineer; and Allan McDonald, of 'Knox-street, Numurkah, aforesaid, architect, for "An improved compressed air motor." 5th February.

No. 8482. By Jonathan Bear, of Imperial Chambers, Bank-place, in the city of Melbourne, in the colony of Victoria, patent agent, for "An improved aquatic velocipede or apparatus for travelling over water." 6th February.

No. 8488. By Arthur Otto Sachse, of corner of Collins and William streets, Melbourne, consulting engineer, for "Improvements in obstacle-clearing implements for agriculture." 7th February.

No. 8484. By George John Hoskins and Charles Henry Hoskins, both of Sydney, in the colony of New South Wales, engineers, for "An improved mode of constructing the spigot ends of riveted wrought-iron pipes." 9th February.

No. 8485. By Thomas Petersen, of No. 70 Union-street, Brunswick, near Melbourne, in the colony of Victoria, potter, for Improvements in continuous kilns (such as Hoffmann's), principally adapted for the burning of red facing bricks." 9th February.

No. 8486. By Thomas Oldham Bennett, of Sydney, in the colony of New South Wales, mechanical engineer, for "Improvements in machine sheep-shears, and in the mode of driving the same." 9th February.

No. 8487. By Parnell Rabbidge, of Sydney, in the colony of New South Wales, electrician, for "An improved microphone to be used as a telephone transmitter." 9th February.

No. 8488. By John Shearer and David Shearer, both of Mannum, in the province of South Australia, machinists, for "An improved wrought share for scarifiers and cultivators." 9th February.

No. 8489. By Herbert Merriman, of 611a Little Lonsdale-street, Melbourne, in the colony of Victoria, brassfinisher, for "Improvements in hydraulic cocks and valves." 10th February.

No. 8490. By William Roberts. of Petersham, near Sydney, in the colony of New South Wales, engineer; and Howard Raymond Belden, of Market-street, Melbourne, in the colony of Victoria, publisher, for "An improvement in revolving table amalgamating machines." 16th December, 1890.

No. 8491. By Thomas Read, of Rae-street, North Fitzroy, in the county of Melbourne, Victoria, for "An improved ball valve hydrant." 11th February.

No. 8492. By William Marsden Ainsworth, engineer, care of A. O. Sachse, C.E., corner of Collins and William streets, Melbourne, Victoria, for "Improved apparatus for preventing sparks escaping from the funnels of boilers." 11th February.

No. 8493. By Hugh William Waddle, of Bryn Jesog, Llanelly, in the country of Carmarthen, Wales, engineer, for "Improvements in fans for ventilating mines or tunnels or for analogous purposes." 11th February.

No. 8494. By Ludwig Epstein, of East Twickenham, in the county of Middlesex, England, electrical engineer, for "Improvements in the formation of electrodes for use in primary and secondary electric batteries." 11th February. No. 34.-March 24, 1891.-1.

No. 8495. By Samuel George Baker Cook, of 114 Commerce street, Baltimore, Maryland, United States of America, merchant, for "An improved wire nail or brad and machinery for making the same and for bradding together the parts of wooden boxes or other articles with such nails or brads." 12th February.

No. 8496. By Francis Stone, of 4 Federal terrace, Eglington-street, Ascot Vale, in the colony of Victoria, Customs officer, for "Improvements in trollies." 12th February.

No. 8497. By Hjalmar Graff, of No. 12 Gipps-street, East Melbourne, in the colony of Victoria, journalist; Edward William Linnell French, of Spring-street, Melbourne aforeraid, dentist; and John Henry Durrant, manager of the Grand Hotel, Spring-street, Melbourne aforeraid, dentist; and John Henry Durrant, manager of the Grand Hotel, Spring-street, Melbourne aforesaid, for "An improved wire strainer." 12th February.

No. 8498. By John McCammon, of No. 198 Albert-street, East Melbourne, in the colony of Victoria, mechanical engineer, for "An improved adjustable automatic flood gate for weirs." 12th February.

No. 8499. By Marcus Stow Hill, of Sydney, in the colony of New South Wales, exporter, for "Improved evaporating tables and flues for desiccating closets." 12th February.

No. 8500. By George Porter Maddison, of Natteyallock, parish of Natteyallock, in the county of Gladstone and the colony of Victoria, for "An improved gold and quicksilver amalgamator by hydraulic pressure." 13th February.

No. 8501. By Albert Malet Le Soeuf, of Armadale, in the county of Bourke, Victoria, gentleman, for "Sproul's hydraulic and pond systems of watering agricultural and pastoral lands." 13th February.

No. 8502. By Edward Davis, of Horsham, in the colony of Victoria, blacksmith, for "An improved rising beam for jump ploughs." 13th February.

No. 8303. By Frederick Leeder, foundry manager to the Singer Manufacturing Company, Killiome, Dumbartonshire, Scotland, for "Improvements in sand-moulding machines." 13th February.

No. 8504. By Edward Waters, of No. 13] William street. Melbourne, in the colony of Victoria, patent agent, for "An improved system of electrical supply or distribution, and improved apparatus therefor." 13th February.

No. 8505. By William Adolphus Smyrk, of 200 Cecil-street, Albert Park, joiner, for "An improved self-acting wall ventilator," 14th February.

No. 8506. By Isaac Ackland, of Lorquon, in the colony of Victoria, blacksmith, for "Improvements in ploughs and cultivators." 14th February.

No. 8507. By Charles Hilberd, of Bromby-street, South Yarra, Melbourne, Victoria, contractor, for "Reversing window sashes, and improvements in hanging and operating same." 14th February.

No. 8508. By William Tregear, of Burwood, in the colony of New South Wales, turncock, for "An improved hydrant." 16th

No. 8509. By William Robinson, of 95 Milk-street, Boston, Massachusetts, in the United States of America, engineer, for "Electric motor car." 16th February.

No. 8510. By The Wolseley Sheep-shearing Machine Company Limited, of Great Britain, whose registered office is at No. 4 Sun Court, Cornhill, London, England, for "Improvements in flexible couplings or joints for toothed wheel gearing." 16th

No. S511. By Henry Thomas Cobern, of S2 George street, Launc ston, in the colony of Tasmania, master tailor and clothier, for "A time-saving and convenient sample-book suitable for merchant tailors, watchousemen, commercial travellers, woollen manufacturers, drapers, &c." 17th February.

No. 8512. By Thereon Solyman Eugene Dixon, residing at No. 53 Dearborn street, Chicago, in the county of Cook, State of Illinois, U.S.A., lawyer, for "Improvements in secondary batteries." 17th February.

No. 8513. By Richard Pennefather Rothwell, of 27 Park-place, New York city, in the State of New York, one of the United States of America, mining engineer, for "Improvements in apparatus for sinking shafts." 17th February.

No. 8514. By Merle J. Wightman, of Scranton, Pennsylvania, one of the United States of America, for "Electric motor controllers." 17th February.

No. 8515. By Charles H. Hard, Orrin Gilmore Franks, and Albert Edward Loomis, of Oneida, in the county of Madison, in the State of New York, United States of America, manufacturers, for "Improvements in machine for weaving wire mattresses."

No. 8516. By James Muir Dalglish, of Nos. 465-473 Little Bourke-street, Melbourne, in the colony of Victoria, coppersmith, An improved attachment to hydrant valve boxes or fire plugs." 17th February.

No. 8517. By Henry Thomas Cobern, of 82 George-street, Launceston, in the colony of Tasmania, master tailor and clothier, for "A sample fastener to fasten woollen samples to card-board, instead of gum as used at present." 18th February.

No. 8518. By Moritz A. Melville, of 11 Roger-street, Richmond, in the county of Bourke, Victoria, for "Improvements in automatically locking and unlocking railway carriage doors." 18th February.

No. 8519. By Henry Fairfax Williams, of the city and county of San Francisco, State of California, United States of America, gentleman, for "A composition of matter to be used for paving, roofing, and building purposes." 18th February.

No. 8520. By Frank Redeliffe Letheren, of 3 Lorne-street, Hawksburn, in the colony of Victoria, ironmonger, for "An improved self-locking barrel bolt for securing doors or windows." 19th February. No. 8521. By Ludwig August Ferdinand Vitzdamm, No. 23 Princes-street, Prahran, near Melhourne, in the county of Bourke, venetian blind maker, for "An improvement in venetian blinds, to be called 'The patent modern venetian.'" 19th February.

No. 8522. By John Cook, agricultural implement maker, and Henry McGowan, striker, both of Stawell, in the colony of Victoria, for "Improvements in and relating to the rising beam of jump ploughs." 20th February.

No. 8523. By James Peter Franki, of Montrose, Balmain, near Sydney, in the colony of New South Wales, managing engineer, for "Improved means of exposing a portion or the whole of the undersides of vessels in loadsteads, harbors, and rivers, &c." 20th February.

No. 8524. By Moritz Wolff Judell, of Adelaide, in the province of South Australia, gentleman, for "Improvements in the process of extracting taunin and resinous matter from wattles and other plants, together with apparatus for carrying the same into effect." 20th February.

No. 8523. By Thomas Young, of 27 St. Vincent-place, Glasgow, in the county of Lanark, Scotland, engineer, for "Improve-ments in valves for corrosive or other fluids." 21st February.

No. 8526. By Henry Jeremiah Smith, of No. 55 Bell-street, Fitzroy, near Melbourne, in the colony of Victoria, engineer; and Hubert Willy Christian Henricks, lately of Maryborough, in the colony of Queensland, at present residing at Melbourne aforesaid, dairyman, for "Improvements in machines for milking cows and other animals." 20th February.

No. 8527: By John Kelly, of Kilkerran, in the province of South Australia, farmer, for "An improved double action stump jumping plough." 21st February.

No. 8328. By Albert Hugo and Arthur O'Neil, of Geelong, in the county of Grant, Victoria, for "An improved rabbit exterminator." 23rd February.

externment. 23rd February.

'No. 8529. By Alfred Upton Alcock, of 206 Russell-street, Melbourne, in the colony of Victoria, electrician, for "Improvement in alternating dynamos." 23rd February.

'No. 8530. By Edward Waters, of No. 131 William-street, Melbourne, in the colony of Victoria, patent agent, for "Improvements in autographic telegraphs and automatic switches for the same." 23rd February.

No. 8531. By John Brown, of 21 Brighton-street, East Richmond, near Melbourne, in the colony of Victoria, for "Breaking the gauge of railway and tramway lines, and named 'The Victorian break gauge.'" 24th February.

No. 8532. By Edward Francis Hutchins, of No. 259 Fitzroy-street, Fitzroy, near Melbourne, in the colony of Victoria, farchitect, for "Improvements in and relating to the sills of windows or doors for buildings." 24th February.

No. 8533. By Gustav Bernhard Reetz, of No. 454 Collins street, in the city of Melbourne and colony of Victoria, merchant, "An improvement in neckties and in the method of holding the same." 25th February.

No. S534. By Alfred Johnson, of Hamilton, in the colony of Victoria, watchmaker and jeweller, for "An improved combined pocket sun-dial and compass." 25th February.

No. 8535. By Charles Henry Metters, John Thomas Metters, and Frederick Metters, all of Post Office place, in the city of Melbourne and colony of Victoria, range manufacturers, for "An improved apparatus for ventilating cooking stoves and ranges, 25th February.

No. 8536. By Charles Nicholas Morris, of the Bridge Hotel, Williamstown, in the colony of Victoria, for "Improved apparatus for mixing hydro-carbon vapour with air, coal gas, or water gas." 25th February.

No. 8537. By John Miller, of Nos. 225 and 227 Russell-street, Melbourne, in the colony of Victoria, engineer, for "An improved method of destroying rabbits." 25th February.

No. 8538. By George Lansell, of the Fortuna Crushing Works, Sandhurst, in the colony of Victoria, quartz miner, for "Improvements in apparatus for equalizing the strain on winding machinery." 25th February.

No. 8539. By George Tom Olver, of Montague-road, South Brisbane, in the colony of Queensland, foreman of works, for "An improved apparatus for locking the wheels of vehicles." 27th February.

No. 8540. By Charles MacMahon, of East Melbourne, in the county of Bourke, gentleman, for "Improvements in spark arresters for locomotives." 27th February.

No. 8541. By Henry Harper, of 3 Cornwall Gardens, Queen's Gate, electrical engineer; John Tryon, of 1 Stone Buildings, Lincoln's Inn, solicitor; and Thomas George Poole, 58 Bread-street, Cheapside, electrical engineer, all in the county of Middlesex, England, for "Improvements in electric arc lamps." 27th February.

No. 8342. By Richard Alliott Smithurst, secretary of Richard Hornsby and Sons Limited, of Spittlegate Ironworks, Grantham, in the county of Lincoln, England, engineers, for "Improvements in reaping or harvesting machines." 27th February.

No. 8543. By Isaiah Lewis Roberts, of Brooklyn, New York, United States of America, electrician, for "Improvements in apparatus for use in the electrolytic decomposition of metallic salts." 27th February.

No. 8544. By Ludwig Mond, of Winnington Hall, Northwich, in the county of Chester, in the Kingdom of England, manufacturing chemist, for "New or improved manufacture of nickel and of articles of nickel or plated with nickel." 27th February.

No. 8545. By Thomas Griffiths, of Sydney, in the colony of New South Wales, civil engineer, for "An improved grease trap or intercepter." 28th February.

No. 8546. By Edward Lewis, of Salisbury Buildings, Bourke-street, Mclbourne, in the colony of Victoria, agent, for "An improved hydrant valve." 28th February.

	Complete Specifications Accepted.				
No.	Date of Publication	. Name,	; Title.		
	1891,				
7559 7578 7594	February 6 February 6 February 6	Nathaniel Greening Archibald Campbell Alexander Sutherland	Improvements in wire weaving looms An improved shirt Improvements in grape mills		
7612	February 6	Arthur William Attenbrow and John Fitzallen Barrett	Improvements in india-rubber and such like valve discs for pumps and pumping engines		
7637 7642	February 6 February 6	Chapman Ewen	An improved wire strainer		
7661	February 6	William Lockhart Morton	Improvements in and relating to underground cable tramways Improvements in design and make of boots and shoes		
7906 8016	February 6 February 6	William Kendall James Hodgkinson	An improved claw hammer Improvements in mechanical stokers and in apparatus connected		
8079 8134	February 6	Frederick Grinnell Alexander McCall	therewith Improvements in automatic fire extinguishers An improved contrivance for preventing horses running away whilst		
8142	February 6	Findlay and Company Limited	at a standstill with vehicles An improved process of and apparatus for preparing "neutral"		
8190	February 6	Abraham Ambler	timber, so as to fit it for use in making packages to contain butter and other alimentary substances Improvements in the method of and apparatus for washing or		
-	' ' ' '		cleansing wool and other textile fibres, also applicable to the washing of clothes		
8212 8261	February 6	John Sen Thomson Matthew Highet Lauchlan	An improved pneumatic churn Improvements in tapping cocks and valves		
8283	February 6	Robert Rogers	An improved means for straining and fastening fence wire		
8292 8311	February 6	Henry George Bedell Henry Jerger	An improved gas regulator and purifier An improved water engine		
8318	February 6	William Gillies	Improvements in machines for sharpening the combs and cutters of sheep-shearing machines, and for grinding and polishing flat		
8327	February 6	Reuben Hallenstein	surfaces Apparatus for working fire-proof doors, and for closing lift openings and other apertures in floors of buildings		
8329	February 6	Hugh Watson Mackenzie	An improved machine for gauging, cutting, and panning the dough used in the manufacture of biscuits		
8330	February 6	Samuel Howard Stott	Improvements in apparatus for diffusing upon plants fertilizing, insect-destroying, or other compound in liquid form		
8332	February 6	Charles Robert Clarke Tichborne, Alfred Edward Darley, Marma- duke Francis Purcell, and Samuel Geoghegan	A method of and appliances for the collection and utilization of the carbonic acid gas and other products given off during the process of all fermentation		
8333 8345	February 6	George Samuel Baker	Improvements in oven lights		
-8358	February 6	The Marshall Improved Window Furniture Company	A new or improved heat lowering and releasing apparatus Certain improvements in sash balances		
8362	February 6	Giovanni Battista Zerderli and John O'Grady	An improved anti-acetic bung and spigot for wine casks		
8364	February 6	Thomas Alexander Patterson	Improved means for producing a fine spray or mist for watering plants and cooling purposes		
8372 8390	February 6	Joseph William Corbett William Henry Coward	A new cementitious and fire-resisting composition Improvements in mills for crushing or pulverizing cres and other substances		
8403	February 6	Edward Samuel Oliver	An improved hand tool, principally applicable for opening packing cases, and taking up and laying flooring boards		
8404 7544	February 6 February 13	Marcus Stow Hill Matthew Thomas Chapman	An improved pneumatic desiccating closet Improvements in process and machinery for boring or drilling the earth		
7640	February 13	Edward Hart	Improvements in machinery or apparatus for shearing or clipping sheep or other animals, parts of which improvements are also		
7678 7710	February 13 February 13	William Duff Ritchie Matthew Sharp Rome	Applicable for actuating or driving other machinery or apparatus An improved plough A system for the application of a remedial antidote in cases of snake		
8049 8136	February 13 February 13	John Kempf Campbell	bite, &c., without the aid of a doctor Asphalte composition		
8193		George Goodlet	Improvements in machinery for compressing and accumulating air and water		
		Gustaf Dillberg and James Alex- ander Philp	Improvements in printing appliances		
8280	February 13	John James Woolgar	Improved appliances for the more effective combustion of fuel in boiler furnaces		
8312 8323	February 13	Charles Riddell, , ,	Improvements in the manufacture and application of the compounds of chloride of sulphur with fatty bodies		
8323	February 13 February 13	Parnell Rabbidge Frances Ann Fisher	Improvements in telephones A new or improved safe which is more especially applicable to storing and cooling butter		
		· · · · · · · · · · · · · · · · · · ·			

COMPLETE SPECIFICATIONS ACCEPTED—continued

No.	Date of Publica	tion.	Name, -	Title.
	1891.			
8361	February	13	William Holme Davis William Lacy Clark	Improvements connected with aerated liquor fountains Improvements in machinery for heating carpets
8377 8384	February February	13 13	Horace Arthur Grayson	Improvements in alphabetical and other indexes
8386	February	13	Thomas Alva Edison	Improvements in methods and apparatus for applying the power of electric motors, especially applicable to electric railways
8393	February	13	Herbert Oates Capes	An improved compound for removing paint, rust, and other coating from metal and other surfaces
8395	February	13	Albert Swanson and William Down-	Improvements in disc harrows
		. !	ham Rowlingson Thomas Edwards and Joel James	Improvements in ore furnaces
8396	February	13	Dechle	· · · · · · · · · · · · · · · · · · ·
8397	February	13	Fred. Walsh, on behalf of The Parke and Lacy Company	Improvements in certain descriptions of ore concentrators
8405	February	13 13	Theodore Weld Sterling	Striking devices Rock-drilling machines
8406 8415	February February	13	Edmond Rich Gabbett	Improvements in apparatus for mixing, incorporating, or effecting the
		- 1		circulation of liquids and semi-liquids in vessels, also applicable to the treatment of ores
8425	February	13	McHenry England	An improvement in kettles and other utensils in which liquids are boiled
7611	February	20	Alfred Elijah Cropley	Cropley's patent improved wood-splitting maul
7665	February	20 20	William Barwick Fox	Improvements in horse collars An improved medical, electrical, and self-contained coil and battery
7674	February			to be used in the practice of electrical massage and other purposes
7686 7697	February February	20 20	Richard Alfred Busch Frederick George Reeves	An improved method of manufacturing sheet metal signs Improvements in meat-cutting machines
7855	February	20	William Francis Dugins	A check action blind roller
8094	February	20	Robert Hill Crowden	Certain improvements in or connected with brushes used by painters and others
8218	February	20	Samuel Telford Dutton Alfred Edmund Beard and Harry	Improvements in interlocking apparatus for railway signalling Improvements in stump-jump ploughs and cultivators
8256	February	20	Sisson	
$8271 \\ 8381$	February February	20 20	Walter Morrison William McLean	Revolving heel-plates for boots and shoes Apparatus for automatically emptying, cleansing, and disinfecting
				night-soil pans and other utensils for similar purposes Improvements in the production of cold and ice, and in apparatus
8389	February	20	Edward Joseph Hardy	therefor
8417	February	20	William Henry James Rasell	Emptying night-pans in close chamber and preventing evaporation of noxious gases, and cleansing and returning pans with coverings
8446	February	20	David Edwards	Improvements in the rising-beam of jump ploughs and cultivators
7712	February	27	Michael McDermott, Thomas McDermott, and Peter McDermott	Improved mechanism for locking and releasing trap-doors in the bottom of ballast trucks
7745	February	27	James Turnbull Anderson	Improvements in and connected with type employed for head-line
7758	February	27	Henry Williams	An apparatus for holding open and automatically closing gates
8039 8182	February February	$\frac{27}{27}$	Richard Hornsby and Sons Limited	Improvements in harvesting machines
				A quartz-crushing, amalgamating, and gold-saving machine
8272	February	27	David Mudie John Charles	A quartz-crushing, amalgamating, and gold-saving machine Improvements in apparatus for washing, separating, and concen
8272	February	$\frac{1}{27}$	Carl Lührig and John Charles Cunninghame	A quartz-crushing, amalgamating, and gold-saving machine Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities
8272 8298	February February	27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels
8272 8298 8328	February February	27 27 . 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines
8272 8298 8328 8335	February February February February	27 27 . 27 . 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like
8272 8298 8328 8335 8398 8431	February February February February February February	27 27 . 27 . 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tomer Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Ribert Davy Bowman	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved process and apparatus for the production of oxygen gas Improvements in button-hole sewing machines
8272 8298 8328 8335 8398	February February February February February	27 27 . 27 . 27 27 27	Carl Lührig and John Charles Cunninghame John Tomer Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved process and apparatus for the production of oxygen gas Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air
8272 8298 8328 8335 8398 8431	February February February February February February	27 27 . 27 . 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved press and apparatus for the production of oxygen gas Improvements in button hole sewing machines Improvements in engines operated by the explosion of mixtures or combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and
8272 8298 8328 8335 8398 8431 8433 8434 8434	February February February February February February February February	27 27 . 27 . 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Asaley John Robert Topliss	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved process and apparatus for the production of oxygen gas Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures or combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles
8272 8298 8328 8335 8398 8431 8433 8434	February February February February February February February February	27 27 . 27 . 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tomer Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved process and apparatus for the production of oxygen gas Improvements in button-hole sewing machines Improvements in regines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles
8272 8298 8328 8335 8398 8431 8433 8434 8434	February February February February February February February February	27 27 . 27 . 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Asaley John Robert Topliss	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved process and apparatus for the production of oxygen gas Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures or combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles
8272 8298 8328 8335 8398 8431 8433 8434 8434	February February February February February February February February	27 27 . 27 . 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tomer Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved process and apparatus for the production of oxygen gas Improvements in button hole sewing machines Improvements in engines operated by the explosion of mixtures of combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles
8272 8298 8328 8335 8335 8431 8433 8434 8437 8444	February February February February February February February February February	27 27 27 27 27 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved process and apparatus for the production of oxygen gas Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures or combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel
8272 8298 8328 8335 8398 8431 8433 8434 8434	February February February February February February February February	27 27 27 27 27 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improved entable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in the pressure of the production of oxygen gas Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel
8272 8298 8328 8335 8398 8431 8433 8434 8434	February February February February February February February February February	27 27 27 27 27 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marinand other engines An improved portable press for hay, straw, and the like Improvements and apparatus for the production of oxygen gas Improvements in utton-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel
8272 8298 8328 8335 8398 8431 8433 8434 8434	February	27 27 27 27 27 27 27 27 27 27 27 27	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marinand other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title.
8272 8298 8328 8335 8335 8431 8433 8434 8434 No.	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marinand other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title.
8272 8298 8328 8335 8335 8431 8433 8434 8434 No.	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tomner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Homnan and Victor Vul-	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marinand other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title.
8272 8298 8328 8335 8398 8431 8433 8434 8437 8444 No.	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marinand other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures of combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved contrifugal pump, specially applicable for dredgin purposes An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft
8272 8298 8328 8338 8338 8398 8431 8433 8444 No. 8320 8336 8340 8353	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Homman and Victor Vulliez Joseph Lorenz and Jules Joseph Lachaume	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved contrifugal pump, specially applicable for dredgin purposes An improved process of extracting silver from lead ores An improved the sible shaft Improvements in wood-sawing machinery
8272 8298 8328 8338 8338 8398 8431 8433 8444 No. 8320 8336 8340 8353	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marina and other engines An improved portable press for hay, straw, and the like Improvements in a sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles are similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in wood-sawing machinery Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the cor
8272 8298 8328 8338 8338 8398 8431 8433 8434 No. 8336 8336 8340 8353 8354 8354	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis Applicat Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honman and Victor Vulliez Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. A rotary motor for the driving of governors for regulating marina and other engines. An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines. Improvements in engines operated by the explosion of mixtures of combustible vapours or gas and air. Improvements in apparatus for the manufacture of glass bottles are similar hollow glass articles. Type-distributing machine. An improved furnace for the better combustion of fuel. Title. Title. An improved centrifugal pump, specially applicable for dredgin purposes. An improved process of extracting silver from lead ores. An improved process of extracting silver from lead ores. An improved flexible shaft. Improvements in wood-sawing machinery. Improvements in construction of vehicles and chambers for the conveyance or storage of perishable articles of food. Improvements in machinery for excavating and removing earth for the convention of recombing and removing earth for
8272 8298 8328 8338 8338 8398 8431 8433 8434 No. 8320 8336 8346 8346 8353	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honman and Victor Vullicz Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner Moritz Wolff Judell	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marina and other engines An improved portable press for hay, straw, and the like Improvements and apparatus for the production of oxygen gas Improvements in utton-hole sewing machines Improvements in utton-hole sewing machines Improvements in engines operated by the explosion of mixtures or combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the corvoyance or storage of perishable articles of food Improvements in machinery for extracting and removing earth for agricultural subsoling, for extracting roots and stumps, and fe
8272 8298 8328 8335 8335 8431 8433 8434 8437 8444 No. 8336 8336 8340 8354 8363 8363	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Homnan and Victor Vul- Hiez Joseph Lorenz and Jules Joseph Lachaume -John Greenhill and William Gardner Moritz Wolff Judell Henry Bland James Augustus Parker	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marin and other engines An improved portable press for hay, straw, and the like Improvements and apparatus for the production of oxygen gas Improvements in engines operated by the explosion of mixtures or combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improvements in wood-sawing machinery Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the cor veyance or storage of perishable articles of food Improvements in machinery for excavating and removing earth for agricultural subsoling, for extracting roots and stumps, and for haulage purposes An improved horseshoe
8272 8298 8328 8335 8335 8431 8433 8434 8434 No. 8320 8336 8340 8353 8354 8363 8363	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis Applicat Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honman and Victor Vulliez John Greenhill and William Gardner Moritz Wolff Judell Henry Bland James'Augustus Parker William Frederick Startup	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marina and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the cor veyance or storage of perishable articles of food Improvements in machinery for excavating and ramoving earth for agricultural subsoiling, for extracting roots and stumps, and for haulage purposes An improved horseshoe
8272 8298 8328 8335 8336 8431 8433 8434 8437 8444 No. 8336 8336 8340 8353 8354 8363 8363 8363 8374	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Homnan and Victor Vullicz Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner Moritz Wolff Judell Henry Bland James'Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Pieremont	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marina and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in the sewing machines Improvements in engines operated by the explosion of mixtures or combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the cor veyance or storage of perishable articles of food Improvements in machinery for excavating and removing earth for agricultural subsoiling, for extracting roots and stumps, and for haulage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery
8272 8298 8328 8335 8335 8431 8433 8434 8434 No. 8320 8336 8340 8353 8354 8363 8363	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honnian and Victor Vulliez Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner Moritz Wolff Judell James Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Pieremont Richard Wood Davies and Herman	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marin and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures of combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the corveyance or storage of perishable articles of food Improvements in machinery for excavating and removing earth of haulage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery Improvements in brick-making machinery Improvements in brick-making machinery
8272 8298 8328 8335 8431 8433 8434 8434 8437 8444 No. 8320 8336 8340 8353 8354 8363 8363 8374 8373	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honman and Victor Vullica Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner Moritz Wolff Judell James'Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Pieremont Richard Wood Davies and Herman Steinberg Pieremont Richard Wood Davies and Herman Steinberg Pieremont	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marin and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in the engines operated by the explosion of mixtures of combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the cor voyance or storage of perishable articles of food Improvements in machinery for excavating and ramoving earth for agricultural subsoiling, for extracting roots and stumps, and for haulage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery
8272 8298 8328 8335 8431 8433 8434 8437 8444 No. 8320 8336 8340 8353 8354 8363 8363 8363 8374 8375 8376	February	27 27 27 27 27 27 27 27 27 27 27 27 27 2	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honnian and Victor Vulliez Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner Moritz Wolff Judell 'James' Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Pieremont	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marina and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures of combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles are similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in machinery for excavating and removing earth for agricultural subsoling, for extracting roots and atumps, and for hanlage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery
8272 8298 8328 8335 8336 8431 8433 8434 8437 8444 No. 8320 8336 8336 8353 8354 8363 8374 8375 8376 8376 8376	February	27 27 27 27 27 27 27 27 27 27 27 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Homman and Victor Vulliez Joseph Lorenz and Jules Joseph Lachaume -John Greenhill and William Gardner Moritz Wolff Judell Henry Bland James'Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Pieremont Richard Wood Davies and Herman Steinberg Pieremont Richard Wood Davies and Herman Steinberg Pieremont John Joseph North Alfred Upton Alcock	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities. Raising sunken vessels A rotary motor for the driving of governors for regulating marina and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles are similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the cor voyance or storage of perishable articles of food Improvements in machinery for excavating and removing earth for agricultural subsoiling, for extracting roots and stumps, and for haulage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery Improvements in brick-making machinery Improvements in brick-making machinery Improvements in brick-making machinery An improved cigar extinguisher Improved method of propelling electric cars or other vehicles
8272 8298 8328 8335 8336 8431 8433 8434 8437 8444 No. 8320 8336 8336 8353 8354 8363 8374 8375 8376 8376 8376	February	27 27 27 27 27 27 27 27 27 27 27 27 29 4 20 20 20 20 20 20 20 20 20 20 20 20 20	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honman and Victor Vulliez Joseph Lorenz and Jules Joseph Lachaume -John Greenhill and William Gardner Moritz Wolff Judell James'Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Pieremont Lifted Upton Alcock	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures o combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. Title. Title. Title. Title. Title. Improvements in wood-sawing machinery An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the conveyance or storage of perishable articles of food Impovements in machinery for excavating and removing earth for agricultural subsoling, for extracting roots and stumps, and for haulage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery Improvements in brick-making machinery Improvements in brick-making machinery Improvements in brick-making machinery Improved method of propelling electric cars or other vehicles' An apparatus for indicating the order of arrival of the competitors in proventions in decaying the order of arrival of the competitors in proventions in the order of arrival of the competitors in proventions in the order of arrival of the competitors in the order of arrival of the compe
8272 8298 8328 8335 8431 8433 8434 8434 8437 8444 No. 8320 8336 8340 8353 8354 8363 8374 8375 8376 8378 8378 8378 8378 8378 8388	February	27 27 27 27 27 27 27 27 27 27 27 27 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Homnan and Victor Vullicz Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner Moritz Wolff Judell Henry Bland James Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Piersmont John Joseph North Alfred Upton Alcock Edward Jordan Edward Jordan	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in button-hole sewing machines Improvements in the engines operated by the explosion of mixtures of combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. Title. An improved coin-freed apparatus for delivering liquids An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in construction of vehicles and chambers for the convoyance or storage of perishable articles of food Impovements in machinery for excavating and removing earth for agricultural subsoiling, for extracting roots and stumps, and for haulage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery An improved cigar extinguisher Improved method of propelling electric cars or other vehicles' An apparatus for indicating the order of arrival of the competitors in a race, to be called "The runners' silent judge" An improved uncertainty town
8272 8298 8328 8335 8398 8431 8433 8434 8437 8444 No. 8320 8336 8336 8353 8353 8353 8353 8353 8353	February	27 27 27 27 27 27 27 27 27 27 27 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Carl Lührig and John Charles Cunninghame John Tonner Kelly and Archibald McIntyre John Tyler, George Meacham, and William Albert Blandford William Parker Robert Davy Bowman Arthur Helwig Herbert Akroyd Stewart and Charles Richard Binney Howard Matravers Askley John Robert Topliss Walter Thomas Lewis APPLICAT Name. Edward Hughes, Edward Joseph Rigby, and John Sinclair Pirrie Robert Marshall Day Andrew Honnian and Victor Vul- liez Joseph Lorenz and Jules Joseph Lachaume John Greenhill and William Gardner Moritz Wolff Judell James'Augustus Parker William Frederick Startup Richard Wood Davies and Herman Steinberg Pieremont Lifted Upton Alcock Joseph-Lathlean	Improvements in apparatus for washing, separating, and concentrating ores of different specific gravities Raising sunken vessels A rotary motor for the driving of governors for regulating marine and other engines An improved portable press for hay, straw, and the like Improvements in button-hole sewing machines Improvements in engines operated by the explosion of mixtures of combustible vapours or gas and air Improvements in apparatus for the manufacture of glass bottles and similar hollow glass articles Type-distributing machine An improved furnace for the better combustion of fuel Title. Title. Title. Title. Title. An improved centrifugal pump, specially applicable for dredging purposes An improved process of extracting silver from lead ores An improved flexible shaft Improvements in wood-sawing machinery Improvements in machinery for excavating and removing earth for agricultural subsoling, for extracting and removing earth of agricultural subsoling, for extracting roots and stumps, and for haulage purposes An improved horseshoe Catching sparks on railway engines Improvements in brick-making machinery Improvements in brick-making machinery Improvements in brick-making machinery Improvements in brick-making machinery Improved method of propelling electric cars or other vehicles' An apparatus for indicating the order of arrival of the competitors in t

1363

APPLICATIONS ACCEPTED—continued.

No.	Date of Accepts	ance.	Name.	Title.
	1891.			
8408	February	4	Samuel May	An improved rising beam and means of supporting it on stump-jump ploughs and cultivators
8409 8410 8411 8412 8416	February February February February February	6 12 4 11 26	John Meckiff James Simpson Wm. B. H. Watkins Israel Martin Henry Breton	An improved construction of boat Improvements in potato diggers An improved railway carriage door-stop An improved potato-planting device for attachment to ploughs An improved process of marking and identifying the machines or combs used in shearing sheds
8419 8422	February February	10 17	Samuel Purdy Richard Boyd Echlin and Horace John Page	An improved potato digger and screener An improved machine for issuing tickets, receipts, checks, &c., and for recording the number issued
8426 8428	February February	24 5	David Watts Anketell Matthew Henderson	A motive power An improved construction of building for minimizing the danger of fires
8429	February	4	William Priessnitz Bonwick	Improvements relating to bottles and in the means for closing and
8439 8440	February February	12 12	Charles O'Connor Frank Arthur Harris, William Machar, and William George Sandys	opening them An improved elevator and fire-escape An improvement in the manufacture of earthenware drain pipes and linings for sewers
8441	February	24	Frank Miller Brown	Improved means for fixing glass in railway carriage and other windows
8447	February	24	Solomon Cox	dows A new compound for blistering and curing sprains, swellings, mange, and other skin and foot diseases in horses, bullocks, dogs, sheep, and other animals
8455	February	25	Henry Jeremiah Smith and Hubert Willy Christian Henricks	An improved apparatus for milking cows
8456	February	27	George Higgins	Improvements relating to the attachment of the uppers to the soles of boots and shoes for the purpose of making them waterproof
8458 8461 8463 8467	February February February	26 19 26 27	George Smerdon Thomas Andrews Eli Howarth Frederick George O'Bree and James Wildren Buckingham	A clothes-washing appliance to be used with a wash-board Improved means for locking nuts on bolts An improved automatic coupling for railway and other rolling-stock Improvements in ploughs and cultivators to facilitate their passing obstructions
8470	February	26	John Gillett	An improved automatic lock or stop-brake for road vehicles

APPLICATIONS REFUSED.

Date of refusal, 11th February, 1891.

No. 8069. By Charles Andrews, for "An improved portable cooking stove."

APPLICATIONS ABANDONED AND OPPOSED. None.

LETTERS PATENT SEALED.

No.	Date of Scaling.	Name.	-	Title.
7631	1891. February 27	Samuel Lord Sharrock		Improved arrangements of indicating apparatus for hydraulic ele- vators and other analogous constructions
7660 7753	February 23 February 17	Josiah Clifton Firth James Pliny Perkins		An improved insulating and fire-proof material Improved paint base and pigment and processes for producing the same
7766 8014 8026 8115 8119	February 9 February 17 February 17 February 27	James Pratt Dempster James Anderson Donald Grant Brown Frederic George Moore Frederick York Wolseley	: 	An improved machine for pulling up trees Anderson's combined potato planter, digger, and gatherer Preventing any nut from loosening or coming off any bolt A new or improved spraying apparatus Improvements in machines for shearing or clipping sheep and other animals
8120 8188	February 23 February 9	Edmund Hesketh Davies John Kueffer		Improved means for adjusting the position of the axle of two-wheeled vehicles according to the position of the load Improvements in station indicators for railway cars or carriages, and means for operating the same
8191 8198	February 9 February 23	George Ross McKenzie Arthur Onslow Whitington Joseph George Nash	and	An improved cement for joining wood, stone, and other materials Improvements in embossing and other similar presses
8203 8215 8216 8232 8240 8241 8242 8243	February 17 February 9 February 9 February 27 February 23 February 9 February 9	George Von Kauffmann Alexander Stanley Elmore Theophilus Coad Frederik Petersen Francis Ellershausen Francis Ellershausen Edgar Martin Samuel Howard Stott		Improvements in pressure-regulating valves Improvements in the process for obtaining zinc by electrolysis Improvements in fluids for primary batteries Improvements in dredging machinery Improvements in the manufacture of caustic soda Improvements in the manufacture of sulphide of sodium Improvements in filtering machinery Improvements in apparatus for diffusing upon plants fertilizing, insect-destroying, or other compounds
8255 8259 8266	February 17 February 23 February 27	Patrick Bernard Delaney Frederik Petersen Alfred Nobel		Improvements in multiplex telegraphy Improvement in dredging machinery Improvements in the manufacture and application of exp
8267 8268 8287 8308	February 17 February 17 February 23 February 27	John Abbott Alfred Julius Boult Sydney Hood Thorp Joseph Yates	::: ::::	compounds An improved means for loading and unloading vessels Improvements in or relating to pneumatic guns An improved apparatus for affixing adhesive stamps An appliance to facilitate taking pills (medicine)

3 - 74 A N 1 : .. •