Founded by Mathew Carey, 1785.

A House in touch with Three Centuries.

HENRY CAREY BAIRD & CO., NDUSTRIAL PUBLISHERS, BOOKSELLERS & IMPORTERS. 810 Walnut St., Philadelphia, Pa., U.S.A.

810 Walnut St., Philadelphia, Pa., U.S.A.

127 Our New and Revised Cutations of Practical and Scientific Books, 14 gaps, so., a Catalogue of Practical and Stellifegue, Nising, Prespecting, Misrotery, Geology, Assigna, Analysis, etc., a Catalogue of Books on Steam and the Steam Engine, Machinery, etc., a Catalogue of Books on Steaming, Steines, Gus Filting, Pranding, etc., and our adopt adoptinges and Creature, the whole covering every branch of Science applied to the Airs, sent free and free of pastage to anyone in any part of the world who will furnish his address.

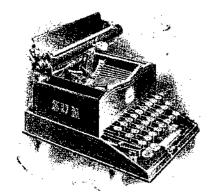
What Do You Think of This? \$900 Brand New Pope \$400 Toledo Steam Cars

of our recent purchase of 58 NEW Toledo Steam Runabouts but 10 BRAND NEW ones remain, and while they last \$400 is our price. This is a chance of your lifetime to buy a New Strictly High Class Car at half price. Also four demonstrating cars of the same make at from \$25 to \$500. Cinches of this kind occur but once in a lifetime. If you are interested, Write, Call or Telephone. Remember we are the largest dealers of second-hand, shop-worn and demonstrating automobiles in America. 20 cars of different makes at all times on sale by us. Cars sold for private parties on a five per cent, commission basis. Contents of factories bought. Cars sold wholesale

MANHATTAN STORAGE COMPANY 334-336-338-340 W. 44th St., near 9th Ave., N.Y. City

Phone 4290-38th
Philadelphia Branch, 631 Market St. FOR SALE.—Five brand new auto clutches, 3 speeds forward and reverse. Cost \$275 each, will close out at \$40.

The Sun Cypewriter No. 2 PERFECT IN MECHANICAL ACTION



SUN TYPEWRITER CO., 289 Broadway, New York

Every Remington **Typewriter** Lasts. Therefore Remington Supremacy Lasts. Remington Typewriter Co.





Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly condential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive Special Notice, without charge, in the

Scientific American

handsomely illustrated weekly. Largest cir-lation of any scientific journal. Terms, 83 a ar; four mouths, \$1. Sold by all newsdealers.

MUNN & CO.361 Broadway, NewYork

Winding and rewinding mechanism, F. W. Draper	
Ginness	88
Stewart 764.8 Wrench, D. D. Getman 764.5 Wrench, F. P. Stevenson 765.0 Wrench, C. C. Cooper 765.0 Wrench, M. J. McDermott 765.0	76 52 66

DESIGNS.

Badge, P. Davidson	37,03
Badge, C. L. Thatcher	37, 03:
Chimney top, W. Porten	. 37,03
Chimney top, W. Porten Coin actuated machines, C. R. Reid	. 37,040
Doll holder, E. J. Bush	. 37,04
Finger ring, R. F. Outcault	. 37,032
Glass vessel, P. Ebling37,033 to	37,03
Hat ornament, C. Nuebling	. 37,04
Mat, J. E. MacMurray Radiator, R. Martindale	. 37,04
Radiator, R. Martindale	. 37,04
Snap hook and trace end retainer, H. M	•
Powers	37,039
Trimming, S. Isaac	37,14
1	

TRADE MARKS.

	INADE MAIMS.		
	Antiseptics, dust laying, Perloin Company of		
		42,989	
	America Beer, Monumental Brewing Company of Bal-		
	timore City	42,982	
	Beer, National Brewery Co	42,983 43,004	
	Breid margarized actton D Coff & Sons	42,972	
	timore City Beer, National Brewery Co. Boxes, folding paper, Whitney & Co. Braid, mercerized cotton, D. Goff & Sons Brick, fire, Queens Run Fire Brick Co. Burner mantles, Anglo American Incan descent Gas Light Co. Canned goods, certain named, A. Booth & Co. Cannet for certain named numbers Kay	43,000	
	Burner mantles. Anglo American Incan	-	
	descent Gas Light Co	42,993	
	Canned goods, certain named, A. Booth		
	& Co	42,975	
	Cement for certain named purposes, Kay Brothers Cement, Portland, Edison Portland Cement		
	Coment Deutland Edican Deutland Coment	42, 998	
	Co	42,997	
	Co. Chemical finishing compound, R. Bernheim,	12,001	
	49 991	42,992	ŀ
	Chocolate and cocoa, Knickerbocker Chocolate	,	
ı	l Co	42,978	ļ
ı	Chutney, pickles, and sauces, Escoffier, Limited	40.070	ı
ı	Cloth sized on stiffened Andrew McTeer	42,976	J
ı	Co. Sized or Stillenes, Ansrew McLean	42,971	ļ
ı	Cloth, sized or stiffenes, Andrew McLean Co. Coal and coke, Kanawha and Coal River Coal Co. Coffee, W. M. Swindler Dentrifice or tooth cream, • W. Hall. Disinfecting and decolorizing agents, Chemische Fabrik auf Actien, (vorm. E. Schering)	12,011	١
ı	Coal Co.	43,001	
	Coffee, W. M. Swindler	42,979	ı
	Dentrifice or tooth cream, O. W. Hall	42,985	i
	Disinfecting and deodorizing agents, Chem-		i
	ische Fabrik auf Actien, (vorm. E.	40.000	ı
	Schering.)	42, 988	Į
	administering J W Storves	43,012	
	Erasers, certain named, Laurel Rubber Co	43,007	į
	Schering.) Electric currents to invalids, apparatus for administering, J. W. Steeves	42,977	I
	Came printed or mounted upon a care, M. A. La Fond Grap juice, Boericke & Tafel Incubators and brooders, C. A. Cyphers		
	A. La Fond	43,002	į
	Grape Juice, Boericke & Tafel	42,981	-
	Unitted blogge exercises and bediese for	42,996	
	Knitted blouses, overvests, and bodices for ladies, Lee & Glenn	43,008	
	Leather polishing preparations. Restorff &	20,000	ı
į	Bettmann	43,011	
:	Magazine or periodical, monthly, Arkell Co	43,003	Ì
	Leather polishing preparations, Restorff & Bettmann Magazine or periodical, monthly, Arkell Co. Malt or malt tonic, Dubuque Brewing and	40.004	۱
	Mailing Co	42, 984	1
l	Matting Co. Medicinal preparation for the cure of influenza, neuralgia, and headach of J. A. Buckley Metals or metallic alloys, composition for cleaning and polishing, N. Thestrup Mineral water, natural, H. E. Reynell & Co. Money boxes, cash registers, and calculating		ĺ
Ì	Buckley	42,986	i
	Metals or metallic alloys, composition for		
Į	cleaning and polishing, N. Thestrup	42,990	1
	Mineral water, natural, H. E. Reynell & Co.	42,980	
Ì	Money boxes, cash registers, and calculating machines, Regina Registrirkassenund Prazisionswerkzeug-Fabrik, G. M. B. H. Paper and paper board, wrapping or building, E. G. Soltmann		l
ı	Prezisionswerkzeng-Fahrik G M R H	42,995	l
ı	Paper and paper board, wrapping or build-	12,000	ļ
ı	ing, E. G. Soltmann43,005,	43,006.	
ı	Paper, carbon, F. Bartelmez	42,974	
	Paper, toilet, A. Backhaus	42,973	
١	Paper, carbon, F. Bartelmez. Paper, toilet, A. Backhaus Pepper, J. H. Burden Pharmaceutical preparations, John Wyeth	43,009	
1	& Brother	42,987	
1	& Brother Pulleys, sash, P. Dosch Razors, H. Boker & Co.	43,014	
į	Razors, H. Boker & Co.	42,994	
1	Roofing, ready tar and felt, Barrett Manu-		
ı	facturing Co.	42,999 j	
	Razors, H. Boker & Co. Roofing, ready tar and felt, Barrett Manufacturing Co. Soaps, North America Soap Co. Wedges, Atha Tool Co.	43,010 43,013	
ı	wedges, Atla 1001 Co	40,010	
I	<u>.</u>		

LABELS. "Duchess Hose," for hosiery, C. Chipman's

Sons	11,254
'Golden Oak," for cigars, Moeller & Kolb.	11,247
'Jersey Queen," for condensed milk, Lacka-	•
wanna Dairy Co	11,243
"Kola-Mint," for a beverage, Liquid Car-	•
bonic Co	11,240
bonic Co. "Lipton's Teas," for teas, T. J. Lipton	11,244
'Lipton's World Renowned Coffee," for	
coffee, T. J. Lipton	11,245
'Marcion-Tare Water," for still and carbon-	
	11,241
'McGary's Universal Silver and Jewelry	
Polish," for cleaning and polishing com-	
pound, J. J. McGary	11,251
'Monogram," for aperient water, L. J. Nedd	11,242
'Princess Hose," for hosiery, C. Chipman's	
Sons	11,255
'Quakeress Hose," for hosiery, C. Chipman's	05"
Sons	11,253
'Rainbow,' for washing machines, Bluffton	11 050
Mfg. Co.	11,256
'Rhinol Cream," for a chemical ointment,	11 050
Rhinol Chemical Co.	11,200
'Royal Fruit," for cigars, H. Sommer	11,246
'Save-al, Egg-Preservative," for egg pre-	11.248
servative, Cyphers Incubator Co 'The Pike Whiskey,' for whisky, Stolz	11,248
	11,238
Bros. "Union Paste," for a cleaning preparation,	11,200
Tokohon & Thombone	11,252
Jokober & Tremborg 'Willow Charcoal Cream and Milk,' for	11,202
medicine, C. S. Nellis Co	11.294
'Wurzburger Schlossbrau," for beer, Atlantic	11,201
City Brewing Co	11 239
ony brewing our minimum.	11,200

PRINTS.

"Coca Cola," for beverages, Coca Cola Co... 1,024 Electrical and Mechanical Instruments.

"K. K. Hog Cholera Preventive," for hog cholera preventive, Home Medicine Co... 1,025 "Politics," for card game, C. J. Brown..., 1,023 "Single and Double Stack Heads and Boots," for stack heads and boots, Excelsior Steel Furnace Co. 1,026

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for 10 cents, provided the name and number of the patent desired and the date be given. Address Munn & Co., 361 Broadway, New York.

Canadian patents may now be obtained by the inventors for any of the inventions named in the forceoing list. For terms and further particulars address Munn & Co., 361 Broadway, New York.

SENSITIVE LABORATORY BALANCE. By N. Monroe Hopkins. This "built-up" laboratory balance will weigh up to one pound and will turn with a quarter of a postage stamp. The balance can be made by any amateur skilled in the use of tools, and it will work as well as a \$125 balance. The article is accompanied by detailed working drawings showing various stages of the work. This article is contained in SCIENTIFIC AMERICAN SUPPLEMENT, NO. 1154, Price 10 cents For sale by MUNN & Co. 136 Broadway, New York City, or any backeting or newsdealer.

Roof/Leak?

Elliott's Durable Asphalt Coating

(1s composed of pure Utah Asphalt, prepared Linseed-Oil and Pine Creosote)

applied on an old leaky shingle, tin or felt roof will make it absolutely waterproof. Stops the rusting process in tin or iron, and stops warping or rotting of shingles. Will add ten years to the life of a new or old roof.

- \P ROOF LEAK is the most durable sun or winter proof paint or coating possible to make. Does not crack in winter or soften in summer. Easily applied. Imparts no taste to water.
- ¶ ROOF LEAK SHINGLE DIP renders the wood absolutely weatherproof, and when the shingles are nailed on the roof they become cemented together so tightly that warping which causes cracked shingles and loose nails is positively prevented.
- ¶ ROOF LEAK is shipped in the heavy liquid cement form, and is applied as received on worn and leaky surfaces. It is reduced with one quart of boiled linseed-oil to each gallon if used as a durable paint on surfaces in good condition. Shingle Dip is shipped ready
- ¶ ROOF LEAK COATING AND ROOF LEAK SHINGLE DIP are made in Black, Maroon and Dark Green. Five gallons up to any quantity, 75c. per gallon, freight paid east of Denver. Returnable at our expense if not approved.
- ¶ ROOF LEAK is sold by up-to-date paint and hardware dealers. Those who try to sell you something else are not doing you justice, because "there is nothing else like ROOF LEAK."
- ¶ Liquid samples, together with an interesting booklet showing its various uses, will be sent on request, or to enable you to give it a practical test, we will send you for \$1.00, delivered free to your door, one gallon, which is sufficient for cementing 100 square feet of leaky surface, or painting 200 square feet. One gallon of Shingle Dip covers about 400 square feet, shingles both sides.

ELLIOTT VARNISH CO., 156 Fulton Street, CHICAGO Pearl Street, NEW YORK

Manufacturers of Fine Varnishes and Inventors of

Roof/Seak?



MACHINES, Corliss Engines, Brewers' and nottless Machinery. THE VILTER MFG. CO., 839 Clinton St., Milwaukee, Wis

CHEMICAL EXAMINATIONS OF ALL DR. H. C. STIEFEL, Bissell Block, Pittsburgh, Pa.

MODELS & EXPERIMENTAL WORK Inventions developed. Special Machinery E. V. BAILLARD, Fox Bldg., Franklin Square, New York



SAVE MONEY and appear neat by wearing M. & M. Rubber Collars. They never wittor turn yellow. Price 25 cents. Send for catalogue. Agents wanted. Address M. & M. MFG. CG. 9th Street. Springfield, Mass.

Dies, Tooks, Models and Special Machines.

Are you interested in Patents, Model or Experimental work? Our booklet entitled

WHAT WE DO-HOW WE DO IT KNICKERBOCKER MACHINE WORKS, Inc., 8-10-12 Jones Street, New York.

MODEL AND EXPERIMENTAL WORK.

SPLITDORF SPARK COILS

MECHANICAL MANUFACTURERS wishing to establish branch in New York City, can be represented by NATIONAL SUPPLY CO., 836 Brogulway, N. Y.

"How to Successfully Operate a Gas or Casoline Engine," This book is the latest and the Tast Word on the subject. Pocket Edition. Price Fifty Cents. For sale by the EURERA PUBLISHING Co., Box 497, Rochester, N. Y.

BUILDERS of Special Machinery. Models. Experimental work. Inventions developed. THE FERN SADLER MACH. Co., Hartford, Conn,

MODELS CHICAGO MODEL WORKS 178 E. MADISON ST CHICAGO ILL ESTABLISHED 1867 THE WRITE FOR CATALOSUE OF MODEL SUPPLIES Manufacturers of HARDWARE SPECIALTIES

Contract Manufacturers and will market articles of merit LORIMER MFG. CO., 153 S. Jefferson St., Chicage, III. We Manufacture on Contract

Anything Mechanical in Any Metal.

MICHIGAN NOVELTY WORKS, Kalamazoo, Mich.

DRYING MACHINES. S. E. WORRELL Hannibal, Mo.



This Insisting and Compelling Electrical Alarm Clock awakes you in spite of yourself. Rings for hours unless stopped. Complete outfl. \$3.50. Electric bell attachment for ordinary clock, \$1.50. ENDERTHY ELECTRICAL CO., 90 Weybosset St., Providence, R. L.

Eclipse Pocket Ammeter
for general battery testing. 0 to 20 amperès.
Flexible cord attached and contact spor in case, which is drawn back into case, when carried in pocket.
Size of watch and very light weight. Can be used in any position. Particularly designed for Auto. use.
Trice \$5.00.

ELDREDGE ELECTRIC M.G. CO. 227 Main St., Springfield, Mass.





Squabs Pay Beat Hens Easter, need attention only part of time, bring big prices. Raised in one marks. Attractive for poultrymen, tarmers, women. Send for FREE BOOK LET and learn this immensely rick home industry.

289 Atlantic Ave., Boston, Mass



MORRIS & RUSHTON Boats and Canoes, stock the most complete assortment of High Grade Cedar: stock the most complete assortment of High Grade Cedar and Canvas-covered Boats and Canoes ever seen in this city. Also Fheaims and Sporting Goods of every description. Send for catalogue. The H. & D. Folsom Arms Co., 314 Broadway, New York

