RECENTLY PATENTED INVENTIONS. Electrical Apparatus.

ELECTRIC COUPLING. - T. C. JAMES. Manistee, Mich. The electric coupling is designed particularly for connecting signal wires between the cars of a railway train. It provides a joint of simple construction so arranged that should the sections be separated, either intentionally or through accident, the circuit will be completed in each section, and will therefore not interfere with the signaling system.

Machines and Mechanical Devices.

WEIGHING-MACHINE.—C. B. COMEGYS, Ashgrove, Mo. The machine is designed to weigh out merchandise by its value—that is to say, when properly set, to weigh out the worth in merchandise of a certain sum of money and to automatically cut off the merchandise when the proper amount has been

UNIVERSAL PRINTING-MACHINE.—C. L Dawson, Jacksonville, Ill. This machine will quickly and cheaply print announcements in letters of large size, and is particularly adapted for use of stores, real estate agents and others. The apparatus comprehends a universal letter type which is constructed in separate sections, so as to be capable of printing any letter or numeral by a selective action which brings into printing position such of the sections as are required for any particular letter.

CLUTCH .- E. DYSTERUD, Monterey, Mexico. The clutch is designed especially for use in connection with alternating-current electric motors. It comprises a clutch member carried by a rotary part of the motor and controlled by centrifugal force, this clutch member working with the second member fast on the shaft which is to be driven. When the motor is revolving at low speed the shaft is not driven therefrom; the centrifugal force, however, attending a revolution at high speed causes the clutch members to be engaged and the shaft is driven.

EMBOSSING-MACHINE.—I. CLAPPER, Osnaburg, Ohio. The machine affords improvements in embossing or printing ornamental designs on hollow building blocks or tiles during the process of forming the same, and is so constructed as to permit ready adjustment of the ϵ mbossing cylinder for any desired depth of impression.

CARDING-MACHINE ATTACHMENT. -D. Ingraham, Penacook, N. H. Mr. Ingraham provides a new and improved carding machine attachment for preventing any of the stock from passing over the ends of the cylinder and going to waste and causing all the stock in the lap to pass to the doffer to insure formation of a lap of uniform thickness throughout its width.

MACHINE FOR MAKING BASKET-COV-ERS .- C. ENGBERG, St. Joseph, Mich. This invention, relating to machines for making covers for baskets and other receptacles, involves certain novel mechanism concerning the holder for the work and the means for rotating or otherwise actuating the holder as it co-acts with the stapling or nailing device.

MACHINE FOR POLISHING RINGS.—G. H. GASKINS, Portsmouth, Va. Mr. Gaskins provides a ring-carrier for the rings to be polished, a polishing strap to operate between its ends on the ring, and a carrier for this strap which is capable of reciprocation. The inventor informs us that the machine has been built and is now running successfully and giving satisfaction in the United States Navy Yard at Norfolk, Va.

Medical Apparatus.

APPLICATOR .- G. J. VAN SCHOTT, Passaic, N. J. The invention provides a new and improved applicator more especially designed to enable the patient, unaided by a physician, to apply medications to the cervix uteri or to the cervical canal without danger of injuring any of the interior parts of the vagina and womb.

BURNER AND INHALER.-W. R. WARNER, Vergennes, Vt. The burner and inhaler is ar ranged to permit the user to burn suitable herbs or drugs in a very convenient manner and to bring the fumes arising from the burning process directly to the mouth or nostrils of a patient to insure proper application of the fumes without waste of the herbs or drugs.

Miscellaneous Inventions,

PIPE AND FLUE CLEANER.—C. F. CRAD-DICK and G. W. FARLIN. JR., Butte, Mont. This simple and practical device affords effective means for the loosening and removal of soot accumulation from the interior of a stovepipe and also from the ordinary chimney flue in a dwelling. It further affords an efficient implement for removing an obstruction from a sewer pipe or the like.

HEEL FOR BOOTS OR SHOES.—J. G. REAS Paterson, N. J. The heel can be readily secured in position and the worn-out sections removed and interchanged or replaced by new ones. It comprises a plurality of rubber blocks clustered together and secured by a circum-Scribing endless metallic band.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.

THE NATION'S BASKETS.

THE NATION'S BASKETS.

The Mergenthaler-Horton Basket Machine Company is making great preparations for handling the big basket contracts which are offered to it. An order has just been given out for the manufacture of 100 new machines for making 8-pound grape baskets. These 100 machines combined will have a capacity of 400,000 8-pound baskets per day. Some idea of the immensity of the demand for this size of baskets may be gathered from the fact that the contracts which are now offered to the Company, for baskets of this size alone will require the running of these 100 machines 10 hours a day 300 days in the year.

Four hundred thousand baskets per day for 300 days is 120 million baskets. If anyone were to see one or two millions of baskets piled up together, he would imagine that there were enough baskets in the pile to pack the grapes of the universe. Yet the State of New York alone demands at least one-half of the 120 million of 8-pound grape baskets, which these machines of the Basket Company will make each year.

There is a net profit to the Basket Company of not less than \$6.00 per thousand on all baskets of this size. And this profit of \$6.00 remains after reducing the selling price of baskets \$2.00 per thousand below any wholesale price ever made. It can therefore be easily seen that the product of these machines alone will earn a net profit to the Company of \$720,000 per year, or over 7 per cent on the entire capital stock.

THE 5-POUND GRAPE BASKET.

The demand for 5-pound grape baskets is fully as great as for 8-pound grape baskets. The Company has already been compelled, for lack of machines, to refuse an order for 45 million 5-pound grape baskets for this year's crop. It now has machines to the number of 26 in operation making 5-pound grape baskets, and will place an order for 75 more of these machines just as soon as it can be done without retarding the work of the 100 machines already referred to as being made to make 8-pound baskets. 8-pound baskets.

PROFIT ON GRAPE BASKETS.

Before this time next year these 200 machines will be working steadily, turning out baskets for next year's crop. The profit on 5-pound grape baskets, as handled by this Company, amounts to a little over \$5.00 per thousand net. The number of baskets which these 5-pound machines will make each year is fully as great as the number which the 8-pound machines will make. Figuring it as 120 million of 5-pound baskets at a profit of \$5.00 per thousand, and it is easy to see that this item will add \$600,000 a year to the Company's profit or a total for grape baskets aloct= of \$1,300,000, which is over 13 per cent on the entire capital of the Company, earned by the business in grape baskets which the Company's automatic machines absolutely control.

QUART BERRY BASKETS.

The volume of business in quart berry baskets amounts in dollars and cents to fully as much as the volume of business in grape baskets, and this Company's equipment for making the quart berry basket is being rapidly extended. At the present time there are already 8 berry basket machines in operation. These machines have a capacity of 12,000 berry baskets per day each, or a total of 96,00° berry baskets per day. Negotiations looking toward the completion of a contract for the manufacture of 50 more of these berry basket machines are going forward as rapidly as possible. When these machines are completed, which will be within a few months, the Company's capacity for making berry baskets will be about one and one-half billions per year.

The selling price of berry baskets at the lowest

baskets will be about one and one-half billions per year.

The selling price of berry baskets at the lowest rate known anywhere is \$2.25 per thousand: this Company is prepared to sell these berry baskets at \$1.60 per thousand and make a net profit of \$1.00 per thousand out of this for every thousand baskets made. More than one-half of the entire berry basket business is already offered to this Company, and it is merely a question of the completion of the negotiations when the entire demand for berry baskets will be turned over to this Company to supply. It is absolutely certain that the whole berry basket business will be contracted to this Company before its machines can possibly be completed to turn out the work. A very simple calculation on the volume of herry basket business, as stated above, sold at the unheard-of low price of \$1.60 per thousand, out of which the Company. This will make a total of profit earned on grape baskets and herry baskets of \$2,800,000 per year, or 28 per cent on the entire capital of the Company.

THE TILL BASKET.

Next in order of calculation is the basket known as the Till Bisket. This basket is used for the shipment of peaches from Georgia and the Southern States; for the shipment of plums and for the shipment of tomatoes from all the Southern points to the Northern markets.

The Mergenthaler-Horton Basket Machine Company has just perfected a machine for the manufacture of these "till baskets." This machine works on the same principle as the machine for making quart berry baskets, and will turn out these "till peach baskets" at the same speed that the berry basket machine turns out berry baskets, which is 12,000 per day.

35 PER CENT TO 40 PER CENT ON ENTIRE CAPITAL.

From the fragmentary statistics which it has been possible to secure, and the offers that have been made to the Company of orders for this class of baskets, it is entirely reasonable to believe that the Company's profit on this class of baskets alone will amount to over \$1,000,000 per year. Adding this profit to the figures already demonstrated in the foregoing, and it becomes an immediate commercial certainty that the Mergenthalor-Horton Basket Machine Company will earn a profit for its shareholders amounting to between 35 and 40 per cent on the entire capital of the Company, without taking into account at all the tremendous volume of business which it is making preparation to handle on the Pacific coast. This volume of business from California, Washington and Oregon is very large. Last year the shipments of fruit east from California amounted to over 200 carloads per week for eight months in the year. The baskets for the handling of this great California and Pacific coast demand will add very largely to the Company's profits. No figures could now be made on this field of operations which would have a sufficiently authentic basis to warrant the effort in setting them forth, but everyone who gives the matter an instant's thought, cen see that the expectation to handle the entire basket trade of the Pacific coast is an entirely justifiable one, and indeed overtures of business from the fruit neople controlling the California trade, are already in progress.

An illustration of the superiority of the auto-

controlling the California trade, are already in progress.

An illustration of the superiority of the automatic machine labor over hand labor in the matter of speed and excellence is given at the exhibitions this Company is carrying on in New York, Chicago, Boston and Philadel-whia, and will shortly be opened in St. Louis, Buffalo and Pittsburg.

Shares of the Merzenthaler-Horton Basket Machine Company's stock are now being sold at 75 cents a share (par value \$1.00 full paid and non-assessable). It will be seen from the resume of the basket situation as herein set forth that no more attractive opportunity for the investment of small or large sums can possibly be found, than in the shares of this Company.

Checks for subscriptions should be drawn to the order of Charles R. Barlow, Treasurer. The Directors reserve the right to reject any subscription. No subscription accepted for less than 50 shares. The price of shares in this Company will be advanced almost immediately; and may be advanced without further notice. The executive offices of the Company are at 287 Broadway, New York.

Business and Personal Wants. INDEX OF INVENTIONS

READ THIS COLUMN CAREFULLY,—You will find inquiries for certain classes of articles numbered in consecutive order. If you manufacture these goods write us at once and we will send you the name and address of the party cesiring the information. In every case it is necessary to give the number of the inquiry. MUNN & CO.

Marine Iron Works. Chicag . Catalogue free. Inquiry No. 2626.—For a machine for putting cylinder heads in piling after being driven.

"U. S." Metal Polish. Indianapolis. Samples free. Inquiry No. 2627.—For manufacturers of adding machines.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J. Inquiry No. 2628.—For engine lathes and machines for making stoves with electric motors attached.

For mining engines. J. S. Mundy, Newark, N. J. Inquiry No. 2629.—For machines for making thite bone substitutes.

Handle & Spoke Mchy. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.

Inquiry No. 2630.-For makers of broom machin-

Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 2631.—For makers of marineengine eastings. We design and build special and automatic machinery

for all purposes. The Amstutz-Osborn Company, Cleve

inquiry No. 2632.—For ball ball-bearing easters for use in rolling mids in handling sheets, being a ball which will revolve in any direction set on hall-bearings. Automobiles built to drawings and special work done promptly. The Garvin Machine Co., 149 Varick, cor. Spring Streets, New York.

Inquiry No. 2633.-For makers of turning lathes Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

Inquiry No. 2634.—For makers of fountain pen stocks.

Clippings of everything printed on any subject in the American and foreign press. United States Press Clipping Bureau 153 Lasalle Street, Chicago, Ill.

Inquiry No. 2635.—For makers of porcelains for spark plugs of gasoline motors. Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W.

A. Wilson Machine Company, Rochester, N. Y. Inquiry No. 2636.—For parties to make engines out of alumi mum.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York.

Inquiry No. 2637.—For a kerosene oil burner to generate 400 deg. of heat within four hours from the time of lighting.

IDEAS DEVELOPED.—Designing, draughting machine work for inventors and others. Charles E. Hadley, 584 Hudson Street, New York.

Inquiry No. 2638.—For a machine for covering wire with silk.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers. 361 Broadway, N. Y. Inquiry No. 2639.—For a machine for forming grass into twine by winding it with thread.

INVENTORS, ATTENTION!-Highest prices paid for novelties in card or paper. Established 30 years. Address The Tablet and Ticket Co., No. 87 Franklin Street, Chicago, Ill.

Inquiry No. 2640.—For makers of double-action suction pumps.

THE MODERN CORPORATION .- Information about incorporation, advantages, expenses, etc., new book, 90 pages, vellum, 56 cents, postpaid. Send stamp for sample pages. The Ronald Press, 170 Broadway.

Inquiry No. 2641.—For the manufacturers of the Acme oil and gas engine.

Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application.

Inquiry No. 2642.—For dealers in counting machines to be attached to typewriters or cash registers. Inquiry No. 2643.—For dealers in well-drilling machinery.

Inquiry No. 2644.—For dealers in aluminium or flowered" tin picture frames.

Inquiry No. 2645.—For makers of small gasoline ngines of 2 h. p. or less.

luquiry No. 2646. - For a foot or electric power machine for cutting cloth in ovals or scallops.

Inquiry No. 2647.-For makers of car-building machinery.

Inquiry No. 2648.-For a stationary gasoline engine for running a small plant for cutting stones. Inquiry No. 2649.—For a power pipe-threading and cutting machine for cutting pipes 2 to 6 inches.

Inquiry No. 2650.—For makers of sewage disposal plants.

Inquiry No. 2651.—For makers of electric mining drills and general mining machinery.

Inquiry No. 2652.-For ax handle and spoke machinery

Inquiry No. 26.53.—For manufacturers of celluloid or hard rubber goods. Inquiry No. 2654 .- For makers of coal briquettes

Inquiry No. 2655.—For manufacturers of lithographic stones.

Inquiry No. 2656.—For the manufacturer of the Grabler check protector. Inquiry No. 2657.—For dealers in useful industrial toys.

Inquiry No. 2658.—For declers in oil drills and machinery for operating the same.

Inquiry No. 2659.—For makers of netting machines, especially for hammocks.

Inquiry No. 2660.-For manufacturers of nut

Inquiry No. 2661.-For dealers in hat creasers. Inquiry No. 2662.-For dealers of aluminium in

Inquiry No. 2663.—For parties to engage in the construction of airships and light engines per horse

Inquiry No. 2664.—For parties to make, in large quantities, a small iron casting similar to a toy. Inquiry No. 2665.—For parties to manufacture rubber rings.

Inquiry No. 2666.—For manufacturers of spring Draft even motors.

For which Letters Patent of the United States were Issued for the Week Ending May 20, 1902,

AND EACH BEARING THAT DATE.

LSee note at end of list about copies of these patents.

Accounts, system of device for keeping hotel, J. Willey
Krauss & von Berneck
Adding device, H. A. Smith
Alloys or compounds of copper and titanium, producing, A. J. Rossi
Apartment house, W. C. James 700,501 Automatic switch, Tancock & Cochrill 700,386 Automatics
Axle journal box and roller bearing for railway cars, E. F. Crowther
Azo compounds, reduction of, M. Buchner. 700,671 Badge, E. B. Wilmarth
; Ball. See Golf ball. Hand ball. Balls, manufacture of playing, E, Kempshall 700,659 Balls, shell blank for playing, E. Kempshall 700,656
Krauss & von Berneck
Barrel, collapsible, D. B. Jones
Bearing cones, lock for adjustable ball, A. O. Smith
Bearing cones, lock for adjustable ball, A. O. Smith
stay for, A. Karlson
Bicycle, I. W. Keithley. 700,426 Bicycle, H. C. Weeks. 700,590 Bicycle brake, A. Main. 700,350 Binder, temporary, E. A. Trussell. 700,388
! Binder, temporary, E. A. Trussell 700,388 Binders, sheet for serial, A. O. & E. R. Kittredge
Bit and reamer, combination, G. A. Lane 700,430 Blast furnace, Norcross & Mitchell 700,549 Block signal system, L. Riebe 700,240
Boat, canal, D. H. Wilcox
Beer cases, combined tastener and corner stay for, A. Karlson. 700,334 Belt shifter, automatic, R. I. Fancher. 700,680 Berth guard and ladder, J. Plaut. 700,233 Bicycle, I. W. Keithley. 700,426 Bicycle, H. C. Weeks. 700,590 Bicycle brake, A. Main. 700,350 Binder, temporary, E. A. Trussell. 700,386 Binders, sheet for serial, A. O. & E. R. Kittredge 700,506 Bit and reamer, combination, G. A. Lane. 700,430 Biast furnace, Norcross & Mitchell. 700,549 Block signal system, L. Riebe 700,240 Boat, canal, D. H. Wilcox. 700,393 Boiler tubes or hollow shafting, stopper for, H. T. Mason 700,361 Both lock, O. Jones. 700,362 Book, account, N. L. Duncan 700,630 Book, note, A. L. Holton 700,648 Book supporter, revolving, Manuel & Nottingham 700,523 Bottle Cleaner, D. H. Irving 700,439
Book supporter, revolving, Manuel & Not- tingham
Bottle closure, J. M. van Meter
Bottle stopper, G. Lispenard
vice, Z. D. Butts
Mitchell
Buffing roll, A. B. Fowler
Burnishing or polishing machine, O. A. Hanford
Calender roller, J. Kleinewefers. 700,338 Camera, roll holding, R. H. Trumbull. 700,264 Can holder, L. Funck 700,322
Cap vizor and eye shield, combined, H. L. Waldron
Car, convertible, J. O'Leary, reissue
Car coupling, automatic, J. Darling
Car fender, street, C. O. West. 700,629 Car, mining, D. L. Brown. 700,718 Cars, friction draft rigging for railway, Hennessey & Moore. 700,422 Carbonated waters, manufacture of steril- ized, T. Weyl. 700,464 Carbureter, Diehl & Barber 700,307
Cars, friction draft rigging for railway, Hennessey & Moore
ized, T. Weyl
Carpet fastener, E. H. Humphrey
outlier, or it. someon
Casting car wheels, core for, L. R. Fraught. 700,313 Ceramic products, manufacture of, M. Buch- ner Chair and cradle combined A. Nadeen. 700,673
Ceramic products, manufacture of, M. Bucular and Color, combined, A. Nadeau. 700,673 Charcoal heater, T. O'Brien. 700,228 Chemical apparatus, J. A. Wesener. 700,268 Chimney cowl or ventilator, M. Schwartz 700,568 Churn, M. M. Sweetman. 700,338 Cigar clipper and match lighter, R. E. Jack 700,331 Cigar package, E. A. Wilcox. 700,335 Cigarette making machine, F. Sticker. 700,253 Clock, secondary electric, S. P. Thrasher. 700,456 Clock striking mechanism. A. Tomek. 700,456 Clothes pin, wire, Lafo & Tirrill. 700, 400 Clutch W. Histoher. 700,456
Churn, M. M. Sweetman. 700,385 Cigar clipper and match lighter, R. E. Jack 700,331
Cigarette making machine, F. Sticker 700,253 Clock, secondary electric, S. P. Thrasher. 700,454 Clock striking mechanism A. Tomek. 700 456
Clutch, M. H. Fischer
Cock, ball, F. F. Flagg
Coherer, H. Shoemaker
C. Indahl
Concrete and metal skeleton for building purposes, O. Ruhl
Conveyer nett, J. M. Dodge
Corset, A. E. Parsons. 700,531
Couplings, yoke and draft bar for, R. Morris Cover for tumblers and F. J. Laborator (200,347)
Cranberry picker, C. M. Blydenburgh. 700,635 Cuff holder, W. Thurman, reissue. 11,933 Cull nary yessel I. Ambler 700,338
Cultivator, M. J. Todd. 700,573 Cultivator, lister, A. Lindgren 700,665 Cultivator, two-row I. Kirlin 700,322
C. Indahl Compound or multiple cylinder engine, I Kling purposes, O. Ruhl. Concerte and metal skeleton for building purposes, O. Ruhl. Condensing system, steam, J. D. McRae 700,223 Conveyer belt, J. M. Dodge. Conveyor chair, C. W. Levalley. Conveying apparatus, F. R. French. Corset, C. W. Levalley. Corset, L. S. Foerster. Cotton gin, R. B. Lumpkin. Cotset, A. E. Parsons. Cotton gin, R. B. Lumpkin. To0,347 Couplings, yoke and draft bar for, R. Morris Cover for tumblers, etc., F. L. Jobson. To0,636 Cranberry picker, C. M. Blydenburgh. Cullinary vessel, L. Ambler. Cullivator, M. J. Todd. To
Cycle motor driving apparatus, H. J. Lawson 700,209 Damper, R. Winter 700,396
Dehorning instrument, J. G. Brown. 700,168 Delivery mechanism. G. F. Read. 700,238 Desk, cabinet, R. J. Copeland. 700,174
Detergents, making, G. Bamberg
Son R. Winter 700,206
Door securer, D. J. Matheson
anism for sliding, W. S. Lincoln 700,345 Draft evener, E. Burns

(Continued on page 387)

Млу	31,	1902.			Scientific	A
Dredge, h	y (lrzint	ic, G. 1	- Cudner	700,406	Level, ditching and terracing, E. A. Bos-	Ī
Drier and Drilling a Drilling of	kilu, nachin r like	Dowell ie, R. machine	& McHenry M. Downie, F. H. Pierpout.	700,482 700,678 700,368	trom 700,737 Levers, thumb latch for adjustment, J. Mac- phall 700,213	
11/6, 111101	HIMIKIII	12 8211110	E Luratih holding ring, F.	700,565 700,521	Lock. See Bolt lock. Door lock. Lock, G. T. Roberts	
Dynamo (B Di Edger, ga	r mot mean ng. C	tor brus Johnse	h holding ring, F.	700,182 700,203	Lock. See Bolt lock. Door lock. Lock. G. T. Roberts. 700,242 Loom harness motion, Brindle & Steere. 700,633 Loom reed. R, Wilms. 700,633 Labricants indicator, P. C. E. Goetze. 700,683 Labricants, testing, P. C. E. Goetze. 700,683 Labricants, testing, P. C. E. Goetze. 700,683	
Electric a Electric l Electric e	dairm, oattery devato	D. Vi. ; C. 1 n. J. C	on.	700,585 700,497 700,676		
			Humanrolling metans there- rent, R. Eickemeyer		L. G. M. West. 700,279 Mail marking machine, H. B. Walte. 700,586 Match machine, K. Wiessne 700,392 Match machine conveyer chain, E. M. Lock-	П
Pricettical	appar	atns, m	eans for ventilating ley		wood, Ir. 700,433 Match safe, G. H. Statett. 700,431 Matrless, making justified, A. W. Catheart 700,360 Matrix die mechanism, A. W. Catheart 700,300 Measurer and register, log. E. L. Arthur 700,286 Mechanical movement, F. W. Jaeger. 700,202 Medical cathing. Faviley & Freenen. 700,503	
Electrical	storus	s, appar	of G. L & D. C.		Matrix die mechanism, A. W. Catheart 700,301 Measurer and register, log, E. L. Arthur 700,286 Wochsuigel movement F. W. Jagger 700,202	1
Electricall	y whatus for	nding u	ip driving springs,	700,597	Medical cabinet, Royley & Freeman	13
Elevator Rown	door	operatii	, Hopfelt., 700,495, ig mechanism, H	700,375	S. Haley	1
Ishaless D	elt rec	d or cal	re, S. B. Trapp S. D. Collett rrying apparatus, B.	700,019	Metals, electrically hulverizing, P. Bary., 700,300 Metals from otos and sexup containing same, extracting, S. S. Stadtler, 700,563 Milkand obtaining same, moddied, E. von	1.5
Engine, der e	See (*		or multiple cylin-		Milk and obtaining same, modified, E. von Dungern 700, 631	0
E 150	ulfnee		e, Hage & Waller, explosive, R. A.	700-101	Dungern 700,631 Milk cun, O. N. Ahlberg, 700,536 Milk receptacle lock, P. Muller, 700,358 Mining machine, M. B. Wylic, 700,466 Mining machine, H. B. Dierdorff, 700,636	-
Envelop o l'xtensible Extension	trong	pper, rev ch, P M , C. W.	ersible, W. Masters aghnuts. Munz. er. ixing spangled ma- t. Cornely.	700,522 700,222	Morphanic Morpha	I
Fabrics terial	nuichir to ty	B Critz ne for t extile. 1	ixing spangled um- Cornely	700,305	Motors, cooling means for rotary, L. Wilson 700,276	6 C
Fare reg	ister,	A Nie	lsen	700,703	Moving heavy hodies, apparatus for, C. V. Fowler 700,319 Mover, Inv.n. E. H. Clifton. 700,173 Music box. Otto & Schaub. 700,556	1
Feed reg	ulator.	Moore	& Toluman heater, I. Davie (M. Speucer	700,320	Musical instrument self playing attachment,	h
February mat	ehille.	WOVCH	(M Spencer, wire, F. Stebler Bishee	700.710	Natl puller, W. Penree	li s
Fence pos	st mark	Kings man	emie, Smith & Bis-	700 950	Nitrocellulose and casein compounds, manufacture of C. Bernadac. 700,471 Nitro compounds, reduction of M. Buchner 700,672 Nitro or other compounds, electrolytic re-	1.2
Fender Fertilizer File and	t. Ber distrli cabine	ek butor. W t. letter	. P. Mize , W. S. Grange	700,716 700,5113 700,417	duction of, M. Buchner Nut lock, W. D. Hughes. Oil burner, crude, H. T. Wilson Oils, reduing, E. Douillet. Ore separator, F. R. Waters.	1
File, card File, doca Fine fuel	indes mieut. L'Éuen	K, G. F. E. G. mee. R.	Watt Waters Herzberg	700,391 700,267 700,198	Oils, refining, E. Donillet	
linger rii Firearm, Fire esci	ng, ini revolve ipe, J	itlal F. er, W. f. C. M	G. Frey Jr L. Whiting leComble	700,637 700,592 700,543	Ores, treatment of complex and refractory, F. Elle shausen Package carrier, VV. S. Gilmore Packing machine, merchandlise, R. L. Pul-	
Fire exti	ngnish nguish ngnish	er, W. er, R. er, anto	P. Mize W. S. Grange. Watt Waters. Herzbarg. G. Frey Jr. f. Whiting lieComble H. Bautil. M. Marth unatte, H. C. Mont-	700,695 700,695	Packing machine, merchandlse, R. L. Pat- terson 700,366 Pail supporter, milk, Morrill & Northfeld., 700,226	n 🖓
Fire extin	uguishi	ing syste	ms, main valve for,	700.187		8
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Fluxing Fluxing	ulating and s	g device. separatin	J. Thurtness, 700,644, g compound, A. D.	700,645	Peat briquets, mounfacturing, E. Helbing., 700,42 Peat into fuel, converting, Green & Mar-	0
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PLANE SURVEYING. By Paul C. Nugent. A.M., C.E. New York: John Wiley & Sons. London: Chapman & Hall, Ltd. 1902. 8vo. Pp. xvi-577.

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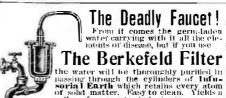


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