

Inquiry No. 1308.—For manufacturers of springs for turning tables in show windows.
Inquiry No. 1309.—For manufacturers of bakers machinery.
Inquiry No. 1310.—For wholesale dealers in lithographs, illuminated scripture text, etc., of German manufacture.

Bat forming mechanism, Pope & Mims. 681,646
Bath cabinet, W. A. Durrin. 681,631
Batteries, diaphragm for electric, J. L. Dobbell. 681,532
Battery plates, making secondary, B. Kuetten. 681,329

Notes & Queries

HINTS TO CORRESPONDENTS.
Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication.

681,646
681,631
681,532
681,329
681,304
681,643
681,549
681,187
681,277
681,586
681,510
681,363
681,221
681,243
681,244
681,479
681,223
681,178
681,556
681,406
681,322
681,602
681,300
681,450
681,393
681,447
681,455
681,421
681,402
681,247
681,442
681,290
681,588
681,632
681,662
681,345
681,250
681,614
681,205
681,462
681,646
681,607
681,321
681,361
681,350
681,434
681,228
681,468
681,526
681,563
681,257
681,576
681,496
681,212
681,298
681,299
681,436
681,633
681,279
681,328
681,485
681,551
681,399
681,281
681,386
681,438
681,403
681,541
681,397
681,422
681,315
681,417
681,343
681,206
681,478
681,484
681,513
681,517
681,663
681,194
681,564
681,186
681,275
681,575
681,218
681,279
681,239
681,201
681,294
681,656
681,224
681,575
681,324
681,463
681,426
681,210
681,375
681,303
681,613
681,419
681,184
681,470
681,416
681,295
681,543
681,495
681,410
681,461
681,378
681,476
681,180
681,441
681,382
681,391
681,287
681,523
681,267
681,384
681,595
681,659
681,425
681,231
681,664
681,366
681,491
681,565
681,389
681,320
681,641
681,571
681,433
681,477
681,637
681,481
681,503
681,326
681,308
681,512
681,198
681,364
681,306
681,349
681,203
681,512
681,198
681,364
681,306
681,349
681,203
681,512
681,198
681,364
681,306
681,349
681,203

Star Lathes
Automatic Cross Feed
FOR FINE, ACCURATE WORK
SENeca FALLS MFG. CO.
695 Water Street, Seneca Falls, N.Y., U.S.A.

ENGINE & FOOT LATHES
MACHINE SHOP OUTFITS
TOOLS AND SUPPLIES
SEBASTIAN LATHES CO. CINCINNATI

FLY PAPERS.—FORMULAS FOR Sticky Fly Papers are contained in SCIENTIFIC AMERICAN SUPPLEMENT Nos. 1057 and 1324.

The "Wolverine" Three Cylinder Gasoline Marine Engine.
The only reversing and self-starting gas engine on the market. Lightest engine for the power built. Practically no vibration. Absolutely safe. Single, double and triple marine and stationary motors from 1/2 to 30 H. P.

B. F. BARNES ELEVEN-INCH SCREW CUTTING LATHE
For foot or power as wanted. Has power cross feed and compound rest. A strictly high grade, modern tool. Ask us for printed matter.

TO MINE OWNERS
You need a Hoisting Engine. You want the best, strongest, safest, most up-to-date engine that is made—the most durable and yet the greatest saver of money.

NO DANGER OF EXPLOSION
There is nothing to get out of order, nothing to cause alarm, in the construction and arrangement of the famous Witte Gasoline Engine and Hoists.

BICYCLE TIRE REPAIRING.—THE Mending of Single Tube Tires.—A practical article illustrating the method of inserting patches and plugs with pliers and pluggers, together with rubber band plugging and the use of puncture bands. Illustrations. Contained in SUPPLEMENT 1102. Price 10 cents. For sale by Munn & Co. and all newsdealers.

SEND 10¢ FOR 126 PAGE ILL. CATALOGUE.
GEARS AND PARTS OF MODELS
GOODNOW & WIGHTMAN BOSTON

BY-THE-BYE, WHEN YOU BUY A BICYCLE
BUFFALO KING, either "Racer" or "Special." The "Queen" is for a lady. No better built wheels on the market—every rider satisfied. Thoroughly up to date in improvements. All parts of best materials. Put together by skilled workmen. Prices, \$35 and \$40. Illustrated Catalogue free on application.

D L HOLDEN REAL ESTATE TRUST BLDG PHILA. PA.
SOLE MANUFACTURER REGELED ICE MACHINES
SEE FIRST PAGE SCIENTIFIC AMERICAN SEPT. 2, 1899.

Queen Transits and Levels
High Grade Instruments with the Latest Improvements. 160 page Engineering Catalogue on application. THE QUEEN 240 page Mathematical Catalogue on application.
ENGINEERS' AND DRAFTSMEN'S SUPPLIES. QUEEN & CO., Optical and Scientific Instrument Works, 59 Fifth Ave., New York. 1010 Chestnut St., Phila.

50 YEARS' EXPERIENCE
PATENTS
TRADE MARKS DESIGNS COPYRIGHTS & C.
Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice without charge, in the Scientific American.
A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, \$3 a year: four months, \$1. Sold by all newsdealers. MUNN & Co. 361 Broadway, New York Branch Office, 635 F St., Washington, D. C.

Furnace fuel feeding device, W. J. Baldwin. 681,429
Furnaces of stationary boilers, draft regulating apparatus for, Pollic & Zimmermann. 681,259
Fuse holder, W. R. Cook. 681,621
Gage, See Water gage.
Game apparatus, A. Ruer. 681,570
Game counter, T. W. Cochran. 681,528
Game table, H. F. W. Lotz. 681,330
Garbage receptacle, Cameron & Purks. 681,493
Garment clasp, M. B. Hammond. 681,313
Gas fitting, Bessey & Black. 681,183
Gas meter, prepayment, E. F. Griffiths. 681,311
Gas, oil, and water separator, F. P. Nourse. 681,369
Gear, driving and braking, G. F. Sturgess. 681,351
Glass molder's tool, J. D. Miller. 681,454
Glassware, apparatus for forming stems on articles of, Davis & Ripley. 681,530
Glue-making apparatus, L. L. Kelsey. 681,229
Governor, electric marine, T. P. Housden. 681,640
Grinding machine, A. R. Clizbe. 681,440
Gun, magazine, H. Carr. 681,439
Guns, telescopic mounting for, H. L. De Zeng, Jr. 681,202
Gyrator, W. P. Northway. 681,254
Handle bar, J. Hullt. 681,325
Harrow, J. M. Killough. 681,230
Harrow, R. E. Hobgood. 681,395
Harvester, belt, J. Young. 681,525
Harvester, potato, N. Lager. 681,644
Hatches, etc., mechanism for moving armored, W. B. Cowles. 681,624
Hearing, magnetic device for restoring and aiding, S. G. Payn, Jr. 681,341
Heating and baking machine, continuous, H. D. Perky. 681,655
Heel or sole molding machine, F. F. Raymond, 2d. 681,344
Hinge, spring, Pomeroy & Albyne. 681,577
Horse detacher, L. D. Howard. 681,550
Horseshoe, R. W. Fadden. 681,570
Horseshoe, M. L. Warner. 681,464
Horseshoe, M. Hallaman. 681,544
Horseshoe shaping device, M. Hallaman. 681,545
Horseshoe, soft tread, C. P. Dryden. 681,411
Hot air register attachment, M. Iversen. 681,552
Hub attaching device, J. A. McNamara. 681,569
Hub band, D. W. Call. 681,666
Husking peg, R. Albach. 681,176
Ice cream cabinet cover, C. Nelson. 681,335
Ice making apparatus, T. Shipley. 681,348
Index cabinet, R. W. Dickenson. 681,409
Index tab, M. C. Tessel. 681,521
Insole, E. E. Orr. 681,338
Iron frame construction, bracket for structural, S. D. Wright. 681,524
Knitting machine, E. J. Franck. 681,209
Knitting machine, E. D. Friedlander. 681,415
Knitting machine, H. E. Harbaugh. 681,546
Knitting machine presser bit, E. A. Hirner. 681,451
Lamp, acetylene gas, W. F. Cooper. 681,197
Lamp, acetylene gas, D. Brown. 681,615
Lamp base, standing, W. E. Hawkins. 681,590
Lamp, burner, incandescent gas, W. Tice. 681,217
Lamp, candle, T. C. Richards. 681,263
Lamp, electric arc, F. B. Badt. 681,179
Lamp, hydrocarbon vapor burning, A. R. Warner. 681,282
Lamp shade holder, T. C. Richards. 681,582
Lamp socket, D. A. Schutt. 681,268
Lamps, heater for electrolytic incandescent, J. Swinburne. 681,352
Land roller, F. A. Bruckman. 681,297
Last block fastener, shoe, J. E. Scott. 681,516
Lath, metallic, G. A. Tuubill. 681,355
Lath attachment, automatic, J. P. Brophy. 681,188
Lathes, speed changing device for automatic, J. P. Brophy. 681,189
Leather seasoning machine, T. Dawson. 681,651
Leather skiving machine, J. R. Scott. 681,347
Ledger, loose leaf, J. Barker. 681,432
Lifts, steering mechanism for guideless, O. Kammerer. 681,555
Line guide, E. A. Holcomb. 681,319
Liquid raising apparatus, pneumatic, E. Gray. 681,216
Lock, A. Petersen. 681,372
Lock, P. Magaro. 681,560
Locket, medallion, D. D. Nevins. 681,336
Loom drop box picker, F. A. Wardwell. 681,599
Loom protector mechanism, L. M. Phelps. 681,373
Loom shuttle box operating mechanism, H. Bardsley. 681,648
Loom shuttle guard, W. Rioux. 681,460
Loom warp tension device, F. Stolzenberg. 681,520
Loom warp replenishing and controlling mechanism, Baker & Kip. 681,647
Lubricating device, W. A. Cornelius. 681,629
Lubricating device, J. W. Bowerbank. 681,615
Lubricator, G. B. Essex. 681,412
Lubricator, C. B. Hodges. 681,639
Magnets of dynamos or motors, core and pole piece for field, R. Hirsch. 681,317
Mail bag fastener and tag holder, J. C. Whaley. 681,600
Mantle support, T. Roderick. 681,265
Marking machine, L. S. Burbank. 681,192
Massage roller and exerciser, combination, G. W. Milkman. 681,331
Match making machine, A. Kelley. 681,452
Matcher head, W. W. Philbrick. 681,458
Mattress, W. W. Nichols. 681,573
Measuring instrument for fitting horse collars, A. Jacquot. 681,553
Meat, preserving, Manasse & Ihlenfeld. 681,225
Meat tenderer, R. Roop. 681,286
Mechanical movement, B. Poulson. 681,486
Metal sheets, apparatus for drying pointed or varnished, H. G. Schumann. 681,346
Microphone and telephone installation, L. Polinkowsky. 681,274
Milling machines, apparatus for automatically returning work tables of O. Schonauer. 681,584
Mine shafts, hoist mechanism for, T. J. Barbour. 681,430
Motor controller, R. W. Scott. 681,269
Motor stop and motion indicator, A. R. Fortie. 681,634
Motors, autopneumatic regulator for, W. B. Cowles. 681,625
Mower, N. S. Hindbargen. 681,316
Mower, J. F. Ellsworth. 681,446
Muffing device, A. O. Very. 681,522
Music leaf turner, W. V. Morrow. 681,332
Nut lock, J. F. Fisher. 681,413
Nut lock, G. W. Dollinger. 681,475
Nut lock, W. H. Tippit. 681,593
Oil can, C. E. Sides. 681,272
Oils, bleaching, J. C. W. Stanley. 681,273
Oleaginous matters, apparatus for bleaching, J. C. W. Stanley. 681,274
Ophthalmometers, chin rest for, J. E. Chambers. 681,494
Ordnance, breech mechanism for breech loading, Dawson & Buckham. 681,531
Ordnance mounting, C. Bonagente. 681,492
Ore concentrator, P. H. Shue. 681,271
Ore concentrator feed box, Michelsen & Borghum. 681,561
Ore crusher, C. H. and H. C. Krause. 681,234
Ore heating, roasting, and smelting furnace, combined, S. M. Trapp. 681,354
Ores or compounds, reduction of, H. A. Irvine. 681,367
Ores treating zinc bearing complex, G. de Bechi. 681,608
Oxyhydrogen lights, pencil for, Schwanhauser & Elmer. 681,488
Packing, piston, W. H. Alison. 681,38
Paper, blotting, J. J. Tinker. 681,50
Paper box machine, C. W. Gay. 681,652
Paper making machine, J. H. Gately. 681,307
Paving block, J. McLachlan. 681,248
Pay table, C. Hirschfeld. 681,318
Pedal, C. Glover. 681,214
Pen or pencil holder, S. Forrester. 681,305
Pens, dotting attachment for H. Oettinger. 681,574
Photographic plate rack, F. W. Potter. 681,658
Piano, automatic, T. B. Powers. 681,261
Piano pedal, J. A. Elwell. 681,390
Picture hanging device, adjustable, E. P. Turner. 681,300
Picture hanging nail, W. Edmundson. 681,500
Pineapple eye snip, J. F. Pack. 681,339
Pipe bending machine, C. R. McKibben. 681,334
Pipe collar and flange, combined, J. H. Groves. 681,312
Pipe coupling, hydrant or other water, H. L. Jordan. 681,420