



# HAIR

**Our Guarantee Backed by the Bank**

We will send you by prepaid express, an Evans Vacuum Cap, to use sixty days, and if you do not cultivate a sufficient growth of hair within this time to convince you that this method is effective, simply return the Jefferson Bank of St. Louis, and they will return the price of the Cap to you. The Cap is used a few minutes each day, and even one application produces a pleasant, tingling sensation, which denotes the presence of new life in the scalp and which cannot be obtained by any other means. Where the life principle has not become extinct, this method of stimulation will usually develop a growth of hair about an inch in length, within the trial period.

A series of letters from a number of people, giving their experience with the Evans Vacuum Cap, appears in this month's "Metropolitan" and "Everybody's" magazine, and we will send copy of these letters, together with an illustrated book, to anyone interested.

We have no agents or traveling representatives. All orders for our invention come through the Jefferson Bank and each customer is protected by guarantee issued by the Bank. For further information address

**EVANS VACUUM CAP CO.**  
212 Fullerton Bldg., St. Louis, Mo.

## GEMS of ART

A Book containing 24 of the most Enticing Phototype Pictures ever shown in one publication. The Artist's Dream Realized. Size of Book 6x8 inches, all full page pictures. Sent prepaid for 25c.

Address  
**THE WHITE CITY ART CO.**  
352 Dearborn St., Chicago, Ill.

## The "Kant-Klog" Sprayer

Something New. Gets twice the results with same labor and fuel. All sizes. Flat or round top. Spray from nozzle. For trees, vines, vegetables, whitewashing, disinfecting, wagon, fire, etc., etc.

Agents Wanted.  
Circular free.

Rochester Spray Pump Co., 20 East Ave., Rochester, N. Y.

## WARREN'S Walrus Roofing

MANUFACTURED BY  
**WARREN CHEMICAL & MFG. CO.**  
18 Battery Place, New York

## EAST ST. LOUIS, ILL.

— AS A —  
**Manufacturing Center**

offers more and better facilities than any other city in the United States. As proof of this, it has the proud record of locating forty factories in the past five years—more than any other city in the West.

The factories now located here employ upward of 20,000 men, entailing an annual pay-roll of over \$13,000,000. The annual output of these factories is upwards of 60,000 car loads.

## What it Means to You

As a manufacturer, two things are of vital importance to you, viz.: Cost of Production and Markets.

East St. Louis offers:

- A cheaper cost of production, by reason of cheap fuel and water, lower freight rates and freedom from labor troubles.
- A home market of 30,000,000 consumers within a radius of 500 miles.
- East St. Louis wants more factories—more lines of business of every description—and is making exceptional inducements to secure them. We will aid you in locating, and if you locate now you can get an exemption from city taxes and a teaming license for a term of years. It will pay you to investigate this. Write for full particulars. Desk B.

## East St. Louis Real Estate Exchange

East St. Louis, Illinois

## 60 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, \$5 a year: four months, \$1. Sold by all new dealers.

**MUNN & Co.** 361 Broadway, New York  
Branch Office, 625 F St., Washington, D. C.

Lozenges and throat tablets, bronchial, Frog in Your Throat Co.	49,271
Lye and potash, Brookman Manufacturing Co.	49,181
Macaroni, spaghetti, and vermicelli, Woodcock Macaroni Co.	49,369
Magazine, monthly, Hoffheimer Soap Co.	49,390
Malices and moonshines, T. Medemann & Son	49,318
Medical preparation for genito-urinary diseases, A. F. Kalkhof	49,284
Medicinal compound, J. P. Cholewinski	49,327
Medicinal preparation, Leslie E. Keeley Co.	49,315
Medicines for diseases of the vagina, W. H. Holliday	49,336
Membranes, Johnson & Johnson	49,281
Mica for lubricating purposes, United States Mica Mining and Milling Co.	49,320
Motor cycles, W. F. Remppis	49,348
Newspaper, weekly, Billboard Publishing Co.	49,228
Oil clothing, J. E. Rowe	49,278
Oils, lubricating, Galena-Signal Oil Co.	49,273
Ointment, F. Watson	49,365
Ointments and lotions, Lehealol Preparation Co.	49,253
Overcoats, coats, vests, and trousers, Marx & Haas Clothing Co.	49,287
Overcoats, coats, vests, trousers, and knee pants, F. B. Q. Clothing Co.	49,308
Paper, blotting, Eaton-Dikeman Co.	49,243
Paper, drawing, Keuffel & Esser Co.	49,252
Paper, writing, Fox River Paper Co.	49,188
Plasters, Johnson & Johnson	49,279
Plows, listers, and harrows, Emerson Manufacturing Co.	49,232
Polishes for wood, metal, marble, and glass, C. H. Smith & Co.	49,242
Printing machines, web perfecting, Gess Printing Press Co.	49,310
Razors, Challenge Cutlery Corporation	49,326
Remedy for certain named diseases, Dr. M. F. Groves' Son & Co.	49,185
Remedy for coughs, colds, croup, and consumption, C. B. Mumford	49,215
Remedy for pain in urinary form, J. D. McLaren	49,289
Roofing and waterproofing material, National Coal Tar Co.	49,290
Scrapers, earth, Kilbourne & Jacobs Manufacturing Co.	49,313
Screw drivers, Tower & Lyon Co.	49,360
Screws, metal, Babbitt Brothers	49,324
Seeds, grass and field, W. G. Scarlett	49,225
Sewing machines and parts thereof, Illinois Sewing Machine Co.	49,337
Sewing machines and parts thereof, Union Special Machine Co.	49,362
Sharpening stones, Pike Manufacturing Co.	49,357
Shirts, collars, and cuffs, Fellows & Co.	49,233
Shoe dressing, Wolf Chemical Co.	49,264
Shoes made of leather and of canvas, V. K. & A. H. Jones Co.	49,264
Shoes, women's leather, A. H. Berry Shoe Co.	49,179
Shotguns, rifles, and revolvers, H. Keidel	49,342
Shovels, spades, and spading forks, Supply Hardware Co.	49,297
Silks, Henry E. Frankenberg Co.	49,235
Silver plated flat ware, hollow ware, and tableware, Wm. A. Rogers	49,266
Silver-plated hollow ware, International Silver Co.	49,338
Soap, laundry, Maple City Soap Works	49,344
Soap, tar, Pioneer Tar Soap Co.	49,317
Stoves and ranges, Gem City Stove Co.	49,356
Stoves, ranges, furnaces, and boilers, Barstow Stove Co.	49,269
Suitings for men and boys, T. Oakes & Co.	49,240
Surgical dressings, Johnson & Johnson	49,282
Talking machine records, Victor Talking Machine Co.	49,364
Thread, cotton, Clark Mile-End Spool Cotton Co.	49,298
Threads, chenille, tinsel, and arrasene, Henry E. Frankenberg Co.	49,275
Toilet water and liquid perfumes, R. Hudnut's Pharmacy	49,221
Tonics and specifics, Fritts & Wiehl	49,192
Tooth washes and powders, Puritan Drug Co.	49,219
Trimmings and braids, Henry E. Frankenberg Co.	49,196
Trousers, fasteners for the waistbands of, Catch On Cloop Manufacturing Co.	49,230
Trucks or low wheel wagons, farm, Deere & Webber Co.	49,329
Trunks, Weller & Oichman	49,331
Tube expanders, Ajax Manufacturing Co.	49,323
Uric acid solvent, Dr. Haskins Co.	49,299
Valves and water valves, steam, Fairbanks Co.	49,353
Vehicle spring seats and cushions, J. L. Clark	49,325
Vehicles, horse drawn, Studebaker Brothers Manufacturing Co.	49,352
Washing powders, Citrus Soap Co.	49,328
Watches and clocks, R. H. Ingersoll & Bro.	49,237
Whisky, Brand Brothers Co.	49,182
Whisky, J. & A. Freiberg	49,189
Whisky, Freiberg & Workim	49,190
Whisky, Gasner & Barzen Distilling and Importing Co.	49,193
Whisky, J. W. Levy & Co.	49,208
Whisky, J. Pohlman & Co.	49,216
Whisky, E. J. Quinn	49,220
Whisky, Raphael & Zeugschmidt	49,222
Whisky, C. H. Ross & Co.	49,224
Whisky, Edgewood Distilling Co.	49,247
Whisky, Weideman Co.	49,259
Whisky, Union Wholesale Liqueur Co.	49,263
Yarns woolen, worsted, and mohair, Henry E. Frankenberg Co.	49,194

### LABELS.

"American Cabinet," for cigars, R. Steinecke Co.	12,635
"Birbaum Cigar Co.'s Caswell," for cigars, J. Hable	12,634
"Columbia Oat Flakes," for oat flakes, Albers Brothers Milling Co.	12,642
"Columbia Wheat Flakes," for wheat flakes, Albers Brothers Milling Co.	12,644
"Dextre," for stationery, M. Shure	12,651
"Es Kay Whiskey," for whiskey, W. P. Shafer	12,635
"Haase's Delight," for cigars, L. Haase	12,636
"Kraakrijk," for biscuits, Union Biscuit Co.	12,645
"La Cigale French Bath Sachet," for toilet articles, F. O'Brien	12,647
"Magnet," for beer, Williams Brothers Co.	12,639
"Patrician Alabastine," for shoe dressing, Faunce & Spinney	12,650
"Patrician Satin Gloss Dressing," for shoe dressing, Faunce & Spinney	12,649
"Penna Bella," for cigars, T. Krieg	12,633
"Rosa de Farina," for cigars, Schmidt & Co.	12,637
"Sauer's Pure Concentrated Extract," for flavoring extracts, C. F. Sauer Co.	12,646
"Violet Self Raising Buckwheat Flour," for buckwheat flour, Albers Brothers Milling Co.	12,641
"Violet Self Raising Pancake Flour," for pancake flour, Albers Brothers Milling Co.	12,640
"Violet Wheat," for wheat flakes, Albers Brothers Milling Co.	12,643
"Vomiting for Diphtheria, Croup, &c," for medicine, Keller Brothers	12,648

### PRINTS.

"Coming Thro' the Rye," for whiskey, Savage Manufacturing Co.	1,566
"Don't Discharge the Cook," for flour, Washburn-Cresby Co.	1,567
"Prize Medal Brand Garments," for underwear, Salt Lake Knittings Works	1,569
"Putman Boots," for boots, H. J. Putman & Co.	1,568
"Tough Heap Canned White Man," for talking machines, E. G. McClure	1,570

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 foregoing list. For terms and further particulars address Munn & Co., 361 Broadway, New York.

## Surveyors

desiring to fit themselves for better paying positions should send for 200-page handbook (FREE) describing our Surveying course and over 60 others, including Civil, Electrical, Mechanical and Steam Engineering, Architecture, Mechanical Drawing, Structural Drafting, Telephony, Textiles, etc.

**American School of Correspondence, Chicago, Ill.**

## Signs, Boxes, Souvenirs & Novelties

of Aluminum in any number, style or design; Lithographed metal signs, boxes, jars, etc. Enamelled Iron Signs of all colors. Designs, estimates and catalogue. N. S. Abbotson Co., 150 Nassau St., N. Y.

## LET US BE YOUR FACTORY

WRITE FOR ESTIMATE ON ANY ARTICLE YOU WANT MANUFACTURED

**STAMPINGS, MODELS, EXPERT WORK**  
WRITE FOR FREE BOOKLET  
**THE GLOBE MACHINE & STAMPING CO.**  
970 Hamilton St., Cleveland, O.

## ICE MACHINES

Carliss Engines, Brewers and Bottlers Machinery, THE VILBER MFG. CO., 599 Clinton St., Milwaukee, Wis.

## MODELS & EXPERIMENTAL WORK.

Inventions developed. Special Machinery.  
**E. V. BAILLARD, 24 Frankfort Street, New York.**

## RUBBER

Expert Manufacturers  
Fine Jobbing Work  
**PARKER, STEARNS & SUTTON, 228-229 South St., New York**

## EXPERIMENTAL WORK

Scientifically and accurately executed. Models and small machinery perfected. SPENGLER & VOLKMER, 61 Fulton Street, Telephone 3653-3611.

## MODELS

signs, boxes, metal stampings, patent articles, novelties, manufactured and sold. Printing on aluminum. U. S. Novelty Co., Lily Dale, N. Y.

## THE NATIONAL MODEL WORKS.

Best equipped Model Works in the United States.  
85-87 Fifth Avenue, CHICAGO.

## DRYING MACHINES.

S. E. WORELL  
Hannibal, Mo.

## Special Machinery designed and built to order.

G. M. MAYER, M.E., 1131 Monadnock Bl., Chicago, Ill.

## THE SCHWEDLER STAMP CO.

STEEL STAMPS, LETTERS & FIGURES, BRIDGEPORT, CONN.

## Telegraphy

Grand Atlas, Warranted and guaranteed. Published by THE NATIONAL TELEGRAPHIC CO., 49 Cortlandt St., New York.

## Magical Apparatus.

Grand Book Catalogue. Over 200 engravings 25c. Parlor Tricks Catalogue, free.  
**MARTINKA & CO., Mfrs., 493 Sixth Ave., New York.**

## NOVELTIES & PATENTED ARTICLES

MANUFACTURED BY CONTRACT. PUNCHING DIES, SPECIAL MACHINERY.  
**E. KONIGSLOW STAMPING & TOOL WORKS, CLEVELAND, O.**

## Experimental & Model Work

City & advice free. Wm. Gardam & Son 45-51 Rose St., N. Y.

## MASON'S NEW PAT. WHIP HOIST

for Outrigger hoists. Faster than Elevators, and hoists direct from teams. Saves handling at less expense.  
Manfd. by **VOLNEY W. MASON & CO., Inc.**  
Providence, R. I. U. S. A.

## "STANDARD" Two-Speed Automatic Coaster Brake Hub

Makes wheeling a delight, eliminates the drudgery. Do not waste money on experiments when you can buy a perfect attachment all in one hub. Our little booklet tells all about it and is mailed free. Write to-day.

**THE STANDARD COMPANY - Torrington, Conn.**

# DULUTH

## THE COMMERCIAL GATEWAY TO THE GREAT NORTHWEST

—AN EMPIRE IN EXTENT.

The location of the city, at the head of navigation, in the center of a continent, 1,400 miles from the sea, gives it unequalled facilities (through 8,000 miles of railways centering here) as a natural distributing-point for a great and prosperous section.

Nature has provided a magnificent harbor with 40 miles of frontage, and its floating commerce is exceeded by only three ports in the entire world.

The manufacture of pig-iron here, on a large scale, is now an assured success, with an increasing demand for the product.

The development of 200,000 hydraulic electric horse-power, 30,000 being now under contract, will attract large manufacturers of many different lines, for which the West will be a growing market.

We have cheap power, cheap coal, cheap gas, cheap iron, cheap raw material of woods, in vast quantities, with unequalled transportation facilities in every direction.

Duluth is an attractive and progressive city, unique in many ways, and a delightful and healthful place of residence.

Duluth invites correspondence with manufacturers who would consider a Western location, where all conditions are most favorable for success.

Address **A. H. COMSTOCK, Chairman**  
**Industrial Committee**  
**COMMERCIAL CLUB OF DULUTH**

## GOVERNMENT POSITIONS

### 50,830 Appointments

were made to Civil Service places during the past year. Excellent opportunities for young people. Each year we instruct by mail hundreds of persons who pass these examinations and receive appointments to life positions at \$340 to \$1200 a year. There is a great demand for Patent Office eligibles. Write for our Civil Service Announcement, containing dates, places for holding examinations, and questions recently used by the Civil Service Commission.  
**COLUMBIAN CORRESPONDENCE COLLEGE, - Washington, D. C.**

PROPOSALS will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 o'clock A. M., February 21, 1906, and publicly opened immediately thereafter, to furnish at the Navy Yard, New York, N. Y., a quantity of machine tools, etc., comprising saw bench, planer, tubular boiler, pumps, and steam winches. Applications for proposals should refer to Schedule 743. Blank proposals will be furnished upon application to the Navy Pay Office, New York, N. Y., or to the Bureau, H. T. HARRIS, Paymaster-General, U. S. N., 117 06.

## MACHINERY AND SPECIAL PARTS

BUILT ON CONTRACT  
new devices developed; successful experimental work done speedily; skilled labor; good facilities; good value for your money.  
**J. R. ENGELMAN MFG. CO.**  
74 Hudson St. near Penn. Depot, Jersey City

## \$5 WATER MOTORS \$1

**BOLGIANO'S LITTLE GIANT**  
**BOLGIANO MOTOR CO., Baltimore, Md.**

## INVENTORS

We manufacture METAL SPECIALTIES of all kinds, to order. Largest equipment; lowest prices. Send sample or FREE model for low estimate and best expert advice.  
**THE EAGLE TOOL CO., Dept. A, Cincinnati, O.**

## LEARN WATCHMAKING

We teach it thoroughly in as many months as it formerly took years. Does away with tedious apprenticeship. Money earned while studying. Positions secured. Easy terms. Send for catalog.  
**ST. LOUIS WATCHMAKING SCHOOL, St. Louis, Mo.**

## BIG OPPORTUNITIES

in making Concrete Products, Miracle Blocks, Sewer Tile, Brick and Sidewalk Tile. Information free. Catalog A.1.  
**MIRACLE PRESSED STONE CO.**  
Minneapolis, Minn.

## TYPEWRITERS

ALL THE STANDARD MACHINES SOLD OR RENTED ANYWHERE at 4 to 5% of the price. EX-RENTAL APPLIED. Don't miss! Superior quality of examination. Write for "Cat." TYPEWRITER EXHIBITION, 202 LaSalle Street, CHICAGO

## OPPORTUNITIES in ENGINEERING WORK

Booklet published by Engineering Co-operative Association gives opportunities, salaries and preparation for Engineering Professions. Mailed for twenty five cents.  
**Earl Lewis, Secretary, 1840 85th St., Brooklyn, N. Y.**

## WELL DRILLING

### Machines

Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on skids. With engines or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.  
**WILLIAMS BROS., Ithaca, N. Y.**