A FAMOUS PROBLEM.

H Did Not Take Newton Long to Find the Correct Solution.

In Newton's time it was often the custom for illustrious mathematiciana when they had discovered a solution for some new and striking problem, to publish that problem as a challenge to the world while withholding their own solution. A famous instance of this is found in what is known as the Brachistochrone problem, which was solved by John Bernouilli. The nature of this blem may be mentioned. It was to and the shape of the curve along which a body would slide down from one point (A) to another (B) in the shortest time. It might at first be thought that the straight line from A to B, as it is undoubtedly the shortest distance between the points, would also be the path of quickest descent, but this is

There is a curved line down which a bead, let us say, would run on a month wire from A to B in a shorter time than the same bead would require to run down the straight wire. noulli's problem was to find out what that curve must be.

Newton solved it correctly. He bowed that the curve was a part of what is termed a cycloid—that is to may, a curve like that which to deed by a nail on the rim of a carriage wheel as the wheel runs along the ed. Such was Newton's geometrical insight that he was able to transmit a solution of the problem on the day after he had received it to the president of the Royal society.

ENGRAVED LETTERING.

Processes Reconstry For Working on Copper or Steel.

Lettering may be described under three heads large lettering, such as bond titles; small lettering, like that done on coupons, cards and tickets, and script, or writing. Some engrav-ers can do good work in all of these branches of lettering, but in large es-tablishments tablishments each man is kept employed at that style in which be excels. In bonds and stock certificates the titles and script are usually done on the plate from which they are to be printed, but there is a lot of small work, common to jobs of that kind, which is done on what are called "dies" or "bedpieces," and transferred from the rolls to the plates.

In large lettering a drawing of the outline of the letters is made on paper to get the shapes, curves and spacing correct. A tracing of this outline is then made on gelatin, and, after filling this with vermillon, a thin coating of wax is laid on the plate and a transfer of the geintin tracing put on the wax. Next the outline is carefully marked through the wax on to the plate. The wax is taken off and the artist is ready to begin his cutting.

Lettering on bank notes, if there is to be more than one note on a plate, is engraved on "dies" or "bedpleces" and transferred to the plate. This insures the exact duplication of the material of each of the notes and also makes it possible to reproduce and retouch the work at any time.

National Nicknames.

Englishmen have submitted to the name of John Bull as suited to the national character. A Scotchman is Sandy. The Irishman derives his name Paddy, from his national patron saint, while an aucient nursery rhyme records the fact that Taffy was a Welshman. English sailors call the Frenchmen, in contempt, Johnny Crapaud, but in France he is Jacques Bonhomme, or, as a bourgeois, M. Prudhomme. Cousin Michel is the name by which the German is known to the continental nation. Mynheer sums up the Dutch, while the Switzer rejoices in the name of Colin Tampon. Don Whiskerandos is almost a national nickname for the Spaniards, dating from Elizabethan times. Italians are known as Lazzaroni and Danes as Danskers.

Finger Rings Among the Ancients. The hands of female mummies found in the tombs of Egypt are literally covered with rings, in many instances there being from two to six on every finger. In some cases these ornaments are composed wholly of gold, but in others, which probably represent all that is left of some poor man's wife or daughter, the rings are brass, glass or pottery ware. According to Josephus and Herodotus, the Chaldeans and Persians and the Babylonians were all very fond of rings and other personal ornaments.

They Warn Crocodiles.

Two or three species of birds are known to accompany the crocodile whenever he appears above water. Many a hunter has had his prospects for a shot spoiled by the alarm given to the reptile by his watchful attendants. When they see any one approaching they will fly at the crocodile's nose, giving loud cries, and the beast never waits to investigate, but instantly shuffles into the water at his best speed.

A Jewel of a Juryman,

Lawyer-Have you formed any opinion on this case? Juryman-No, sir. Lawyer-Do you think, after the evidence on both sides is all in, you would be able to form any opinion? Juryman-No, sir. Lawyer-You'll do .-New York Weekly.

Saved Them.

Eph-How'd you git along ridin' in them there sleepin' cars when you took your trip? Simp-Got along all right, but I caught a colored feller tryin' to sneak away with my boots an' made 'im bring 'em back.--Indianapolis Star. Secondary of counterfelts

Almost a Fatal Misunderstanding. "I thought," said her mother, "that I heard you and Mr. Rockingham quarreling down in the parlor last night." "Ye'es, but we made up before he

went away." "What was the matter?" "He said when he was holding my hand that it was like a little bird fluttering in a cage, and I insisted that it was like a little mouse in a trap. We just had an awful time for awhile."-Chicago Record-Herald.

His Customary Luck. Mr. Makinbrakes (determined not to make a blunder this time)-I was delighted with the way in which the little girl recited that selection.

Eklerly Matron (one of the guests)-You evidently are under the impression that she is one of my children. She isn't, and I thought her performance was extremely tiresome.—Chicago Trib-

Sure Thing. Towne Isn't it ridiculous to say "everybody's business is nobody's busi-

Browne-Why, that's all right. You ee, it means-

Towne-I don't care what it mean It's bound to be the busybody's bus ness at least.—Philadelphia Press.

After Many Tones.



Mr. Stoutely-Why, Dick, you look as if you had not had a dinner since l

Dick-And you look as if you had been at dinner ever since. - Boston

BEHNKE-WALKER **BUSINESS COLLEGE** PORTLAND, ORE.

If you are thinking of attending Business College, you cannot afford to ignore the best one in the North-

Our equipment is unsurpassed. The proprietors are teachers. Our graduates are all employed We will assist you to a position when competent.

SEND FOR CATALOGUE FREE.

DEVERS-

SPICES. 0 COFFEE, TEA. BAKING POWDER. FLAVORING EXTRACTS Absolute Purity, Finest Flavor, Greatest Strength, Reasonable Prices **CLOSSET & DEVERS**

PORTLAND, OREGON.

The Astoria Restaurant.

GOOD, CLEAN MEALS

EXCELLENT

SERVICE

OPEN ALL NIGHT 399 Bond St., cor. Ninth

Cures in 48 Hours URINARY DISCHARGES

& Bladder troubles.

LESSONS IN HARDANGER EMbroidery is given by Mrs. Julius Erickson, 63 West Bond street, Astoria. for 25 cents per hour.

QUICK RETURN COLUMNS.

Situations Wanted Advertisements Inserted Twice Without Charge.

HELP WANTED.

GIRL WANTED FOR HOUSEWORK in family of three. Portland suburbs near car line. Wages \$15.00 per month. Address "D" Astorian.

RAILWAY MAIL CLERKS FOR POSI- 128 Aster St. tions in Oregon; 10 men wanted to prepare for coming examination; be- Suey. ginning salary \$300. Write at once to R. O. Hynen, 12 Breeden bldg, Portland, Ore.

LEARN DELEGRAPHY AND R. B Accounting. \$50 to \$500 a month salary assured our graduates under bond. Our six schools the largest in America and endorsed by all Railroads. Write for estalogue. MORSE SCHOOL OF FELEGRAPHY, Cincinnati, O., Buffalo, M. Y., Atlanta, Ga., La Crosse, Wis., Texsekana, Tex., San Francisco, Cal.

WANTED-EMPLOYMENT AS STAtionary or donkey engineer. Address X, care "Astonian."

WANTED-YOUNG MAN, GOOD EDUeation, would like work of any kind. Address L. M. G., care Astorian,

WANTED-LADY WITH GOOD REFerences to travel for firm of \$250,000 capital. Salary \$1072 per year and expenses; salary paid weekly and expenses advanced. Address, with stamp. J. A. Alexander, Astoria, Ore.

WANTED-A POSITION FOR LIGHT. inside work, willing to learn. Twenty years of age. Address Chas, Larsen, Bay Center, Washington.

MUSIC TEACHER.

MANDOLIN LESSONS GIVEN-MRS. C. D. Stewart, 127 Seventh street.

FOR RENT-FURNISHED ROOMS.

FURNISHED ROOMS-A furnished or unfurnished room of Commercial street, with gas and bath, reasonable. Inquire at "Astorian."

BOARD AND ROOMS FOR SEVERAL parties can be secured at the Holder House, 9th and Duane streets.

rooms very reasonable. 578 Commercial toria. street, Shanahan building.

FOR RENT-FOUR UNFURNISHED rooms for housekeeping. Man and wife preferred. Cheap rent to right parties, 1661 Thirty-fourth street.

FOR RENT-THREE FURNISHED rooms for light house keeping. No chidren. Enquire 472 Commercial street.

FOR SALE,

FOR SALE-SEVERAL CHEAP BED room suits, lot of curtains, shades, one range, and other housefurnishing articles. Apply at once 621 Exchange

LOST AND FOUND.

LOST-IN STAR THEATRE, DIScharge papers from Company "L." Twenty-Third infantry, U. S. A., Finder please leave at this office and receive reward.

FOR SALE-MISCELLANEOUS.

SECOND HAND DONKEY ENGINES for sale, suitable for logging and hoisting purposes. For description and price apply to F. D. Kuettner, Astoria, Oregon,

FOR SALE-CHEAP-HORSE, BUGgy and harness. Inquire Astorian of-

EMBROIDERY LESSONS GIVEN

BUSINESS DIRECTORY

RESTAURANTS.

GUM WAH CO.

Restaurant

TOKE POINT OYSTER HOUSE.

Eastern and Shoalwater Bay Oysters Steaks, Chops, Etc. Open day and night,

11th St., next to Soully's cigar store

FIRST-CLASS MEAL

for 15c; nice cake, coffee, pie, or doughnuts, 5c, at U. S. Restaur-434 Bond St.

BEST 15 CENT MEAL. You can always find the best 15-cent meal in the city at the

612 CommercialSt.

LAUNDRIES.

Rising Sun Restaurant.

The Troy Laundry

The only white labor laundry in the ity. Does the best work at reasonable prices and is in every way worthy of your patrenage.

10th and DUANE Sta., Phone 1981. GARDENING.

POTTED PLANTS AND FLOWERS for sale-Experienede gardening and ob work of all kinds done on short sotice-Address orders to X. C. Care Astorian Office.

WOOD YARDS.

WOOD! WOOD! WCOD! Cord wood, mill wood, box wood, any 578 Commercial St., Shanahan Building kind of wood at lowest prices. Kelly, the transfer man. Phone argr Main, Bara on Twelfth, opposite opera

TAILORING.

B. MARTINSON

FOR RENT-NICELY FURNISHED | Fine merchant tailoring, Room 5, over rooms with stoves; also housekeeping Cooper's store, K. of P. Building. As-

FURNITURE.

ROBINSON & HILDEBRAND

Goodman Bldg. URNITURE, Carpets, Bedding

Stoves, Matting, Window Shades, LINOLEUM, Etc.

BROKERAGE.

C. J. TRENCHARD Estate, Insurance, Commission Real and Shipping. CUSTOM HOUSE BROKER. Office 133 Ninth Street, Next to Justice

Office. ASTORIA. OREGON.



Smith Premier is the simplest and strong-

est of all writing machines. It does better work, does it quicker, lasts longer, and costs less in the long run than any other typewriting machine. It is

The World's Best Typewriter

Let us send you our little book telling all about it. Typewriter supplies. Ma-chines rented. Stenographers furnished.

The Smith Premier Typewriter Company core at Fortaind Or.

NOTICE TO STOCKHOLDERS.

Notice is hereby given that the annual meeting of the stockholders of the Astoria Electric Comppany will be held at the office of the comppany, Page Block, Astoria, Oregon on Monday the eighth day of January, 1906, at 2 o'clock, P. M., for the purpose of Asteria, Ore. electing a board of directors, to serve All kinds of meals. Noodles and Chop during the ensuing year, and for the transaction of such other business as may lawfully come before the meeting.

Astoria, Oregon, December 16, 1905.

C. N. HIGGINS,

PRIVESSIONAL CARDS.

PHYSICIANS.

JAY TUTTLE, M. D. PHYSICIAN AND SUBGEON Acting Assistant Surgeon U.S. Marine Hospital Service hours: 10 to 13 a.m. 1 to 4:80 p.m.

DR. J. P. GORAY. Specialist

477 Commercial Street, 2nd Floor.

EYE, EAR, NOSE AND THROAT 205 Oregonian Building. PORTLAND - - - OREGON

OSTEOPATHISTS.

DR. RHODA C. HICKS OSTROPATH Office Mansel, Bld. Phone Black 2068 573 Commercia: St., Astoria, Ore.

DENTISTS.

DR. T. L. BALL,

DENTIST.

524 Commercial St Astoria Oreson DR. VAUGHAN,

DENTIST Pythian Building, Astoria, Oregon.

Dr. W. C. LOGAN DENTIST.

DR. C. W. BARR, DENTIST. Mapself Building

SEASIDE DIRECTORY.

Telephone Red 2061 Astoria, Oregon

WINES AND LIQUORS.

THE GEM

An up to date resort for Gentlemen. Choice Wines, Liquors and Cigars. Give

us a call and we'll do the rest.



COPYRIGHTS &c.

Scientific American. MUNN & CO, 30 18 roadway. New York

MORNING ASTORIAN Is on Sale in

J. N. GRIFFIN'S BOOKSTORE. UTZINGER'S NEWS DEPOT,

Astoria at

OCCIDENT HOTEL OFFICE.

SCULLY'S CIGAR STORE, JOS. JACOBS, CIGAR STORE.

THE ASTORIAN OFFICE.

Tenth and Commercial Sts.

MEDICAL.

THE Dr. C. GEE WO Chinese Medicine Co.

Formerly located 258
Alder Street; for the
past five years, HAVE
MOVED into the
large brick building
at the south-east corner of First and Morrison Streets. Entrance No. 162 Front St.

Successful Home Treatment Dr. C. GEE WO is known throughout the United States, and is called the Great Chinese Doctor on account of his wonderful cures without the sid of a knife, without maing poison or drugs of any kind. He treats any and all diseases with powerful oriental roots herbs, harks, and vegetables that are unknown to medical science in this country, and through the use of these harmless remedies he guarantees to cure

dies he guarantees to cure
Cotorth, Asthma, Lung Trouble, Rheumetiem,
Nervousness, Stomach, Liver, Kidney, Female
Weshness and all Chronic D'seases.
Call or write, enclosing 4 3-cont stamps for
mailing book and circular. Address,
The C. Os Wee Chinese Medicine Co.,
No. 164 1-2 pjrst St., S.E. Cor. Merricon.
Mention this
Portland Oregon.

HOTELS.

HOTEL PORTLAND

PORTLAND, ORE.

Finest Hotel in the Northwest.

LICK

San Francisco's leading con-venience and family hotel centrally located. Convenient to all car lines, and places of amusement and interest. Cafe and Grill at-tached. Rates \$1.00 per day and up. Street care direct to hotel from and to all depots.

HOUSE San Francisco, Cal.

This is the kind of a Story for which the

you

a better one We want little stories, anecdotes, bits of verse—any clipping from a newspaper, magazine or book that has made you

Think, Laugh or Cry

840 prizes will be given for the best selections. Ten piles of silver dollars as high as the first ien successful competitors are the first awards.

The only condition for entering this competition is that you send with your clipping soc. for a six months' trial subscription to the National Magazine. Address,

JOE CHAPPLE, Editor DORCHESTER AVENUE