Stamps. The process of gumming postage stamps is an much an exact science as the building of the large guns at the Washington Navy Yard, says the Star. This work, like that of practically all other similar kinds for the Government, is done at the bureau of engraving and printing, and so accurate is the process of gumming stamps that when the work is finished the stamps are tested to discover if the coating of mucilage on the sheet Yaries as much as seven ten-thousandths of a pound.

The room where the stamps are gummed is airy and well lighted; it is eightly by fifty feet and contains at present eight gumming machines. The stamps after being printed reach the gumming room from the examining room in sheets eighteen and one-half by twenty-three inches, each sheet containing 400 stamps. The sheets to be gummed are fed by women operatives on an endless chain belt, held by grippers. This chain belt passes under a glass gumming roller, which is automatically coated with the exact proportion of mucilage to be received by the sheet. This mucilage is fed to the roller from a small tank just above. The gummed sheets are then carried by the endless chain belt into a covered drying box fifty feet long, which contains coils of steam pipes, which contains coils of steam pipes, which produce a temperature of 130 degrees Fahrenheit. The sheets of stamps, after a slow journey of one minute, emerge from the other end of the drying box with the mucilage perfectly dry.

The machine automatically delivers the sheets on a table to a lady operative, who, by passing her experienced hand over the gummed surface, determines if the sheets are properly gummed and if they are running through the machines at just the right degree of speed to insure their being properly dried.

After being gummed the sheets are rolled to take out the curl of the paper, and are again inspected to see if there are any defects in the gumming, if they are found to be perfect thy are then counted and pressed and sent to the perforating being in itself an exceedin

To meet the different conditions of To meet the different conditions of the seasons of the year the quality of the gum is changed four times during each year. The winter or soft gum is used during the months of Novem-ber, December, January, February and March. The summer or hard gum is used during the months of June, July, August and September, and the spring and fall gums are used in Ocspring and fall gums are used in Oc-tober, April and May. The summer gum is the hardest, and best resists the humidity during the hot months of the number during the hot months of summer, likewise preventing the sheets of stamps sticking together in the postofices of the country. The winter gum is used to enable the stamps to resist frosty weather, which often causes the stamps to curl and crack. The intermediate gum is used to meet the conditions of half warm and half

the conditions of half warm and half cold weather.

Of course, the most thorough precautions are taken to begin with in 
procuring the very best quality of adheeive postal gum. This gum is deherived from dexterine, a product recured in the process of making ctarch 
from potatoes, corn and cassava root. 
The starch obtained from the foregoing vegetables is treated by being 
roasted at a temperature of about 
200 degrees in its early stages, when 
it later turns to dexterine, which is 
later converted into postal gum. If 
earried further than postal gum it 
changes to grape sugar or giucose. changes to grape sugar or glucose. The best postal gum for stamps is that which contains the least unconverted starch and little, if any, glu-

WE ALL USE THIS GUM

HOW THE STICKY STUFF ON PQSTAGE STAMPS IS MADE.

Coating Must Be Uniform—Greatest Care
Exercised in Placing It on the Letter
Takers—10,000,000 Stamps Gummed in
Eight-Hour Day.

Not one person in five hundred who
licks a postage stamp ever dreams of
the precautions taken by the bureau
of engraving and printing to secure
a uniform coating of the best adhesive
and purest gum on the back of the
stamps.

The process of gumming postage
stamps is as much an exact science
as the building of the large guns at
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operatives on an endless chain belt,
held by grippers. This chain belt,
held by grippers. The sheets to rollers, upon which it drips in tiny streams.

The greatest cleanliness is required The greatest cleanliness is required at every step in the process of boiling and handling the gum, and as the gum is purely vegetable, the stamp licker need not have the slightest hesitancy in applying his moistened tongue to the stamp.

The eight machines now in the gumming room have a canactiv for gumming room have a canactiv for

The eight machines now in the gumming room have a capacity for 01,000 sheets or 19,000,000 stamps, in one day of eight hours' work. Both United States postage stamps and documentary and proprietary revenue stamps are gummed by these machines. At the beginning of the Spanish-American war, when there was an urgent demand for war revenue stamps, there were only six of these machines in operation. They were run night and day to meet the emergency, and gummed 167,000 sheets or 41,000,000 stamps, every twenty-four hours. This large number of stamps furnished Uncle Sam with some of the sinews of war during those trying times. The average consumption of ordinary postage stamps at this time is about 15,000,000 a day.

## Bathers' Perils in Salt Lake.

Bathers' Perils in Salt Lake.

"I have never seen the Atlantic or the Pacific Ocean or the Gulf of Mexico, but have had some experience with salt water nevertheless," said George Y. Russell, of Park City, Utah. He is an official of the great silver mine near Park City, which extends deeper than any other in the world.

"Salt Lake is a remarkable sheet of water in many ways, and bathing in it possesses features which are unique. It is very invigorating and refreshing, to be sure, but if takes some time to become accustomed to the extraordinary buoyancy of the water. It is quite impossible to sink or to drown in the lake, but many people have been killed by the water. When there is a breeze and spray is dashed upon bathers the water is so densely impregnated with salt that the liquid portion evaporates very quickly and leaves a densely of the water.

partners the water is so densely impregnated with salt that the liquid portion evaporates very quickly and leaves a deposit of salt on the skin.

"On several occasions people have drifted out while bathing or been wrecked and thrown overboard and afterward found dead on top of the water, choked to death by the accumulation of salt in their mouths and nostrils. Ordinary salt water bathing, as I discovered to-day, is very different from that in the Salt Lake. I learned that I could enjoy salt water bathing at Chesapeake Beach and took a trip there. It is certainly very pleasant to bathe in water that is salt, but not so calt as in Utah. But the accommodations for the bathers at Salt Lake far surpass, so I am told, anything in America."—Washington Post.

Core River Robs Another.

## One River Robs Another,

Cne Hiver Robs Another.

The modern study of physiography has inade us acquainted with many instances of a struggle for existence and survival among rivers. The most careful student of nature in former years never dreamed that this great law applies to large streams separated from each other by a range of hills, and yet recent investigation shows that the two longest rivers in England—the Severn and the Thames—are struggling, one against the other. The Cotswold Hills lie between the valleys along which they flow, and explorations lately made show that the Severn has been cating backward among these hills, where softer strata underlie them, and has thus succeeded in diverting to itself some of the headwaters that formerly flowed into the Thames. To put it in this way is like endowing an inanimate object with intelligent purpose, but the more one studies nature the more evidence of an actual struggle appears.

The best postal gum for stamps is that which contains the least unconverted starch and little, if any, glucose.

The material used for the purpose of making stamp gum looks very much like flour except in color, and is perfectly clean and wholly vegetable. When the postal gum is delivered in bulk at the bureau by the contractors it is contained in double sacks of 200 pounds each. Before using every consignment is carefully inspected and is subjected to a microscopic examination and chemical analysis by the Near Wakefield, in Yorkshire, a most

### A GLOWING REPORT.

Indiana Man Compares Western Canada With the United States—What Mv. Frank Fisher, a Prominent Duskard, Has to Say After a Trip Through Canada.

Frank Fisher, a Frominant Business.

Has to Eay After a Trip Through
Canada.

The Department of the Interior at
Ottawa has just received from Mr. E.
T. Holmes, the Agent of the Government stationed at Indianapolis, Indiana, the following letter which requires no comment. It is only necessary to state that Mr. F. Fisher, the
writer of the letter, s one of the most
prominent of the Dunkards and
man upon whose word the utmost reliance can be placed. His home is at
Mexico, Indiana, and he will be
pleased to substantiate verbally or
in any other way all that he says in
his letter.

Anyone desiring information should
apply to nearest Canadian Agent,
whose addresses are given: M. V. MoInnes, 2 Avenue Theatra Block, Detroit, Michigan; James Grieve, Sault
Ste Marie, Michigan; J. S. Crawford,
214 W. Ninth street, Kansas City,
Mo.; Benjamin Davies, 154½ East
Third street, St. Paul, Minn.; T. O.
Currle, Room 12, B. Callahan's Block,
203 Grand avenue, Milwaukee, Wis.
C. J. Broughton, 197 Monaduock
Building, Chicago, Ili.; W. H. Benmett, 901 New York Life Building,
Omaha, Neb.; N. Bartholomew, 206
Srifth street, Des Molnes, Iowa; J.
H. M. Parker, 530 Chamber of Commerce, Duluth, Minn.; E. T. Holmes,
Room 6, Big Four Building, Indianapolis, Ind.; Joseph Young, 51½ State
street, Columbus, Ohio.

To My Many Friends:
I am pleased to make a report to

street, Columbus, Ohio,
Te My Many Friends:
I am pleased to make a report to
you of the pleasant visit my wife and
I had in Western Canada.
We visited the territories of Alberta,
Assinibola and Saskatchewan, and
found them far surpassing our imagination, but little did I expect to find
such rich, loamy soil, so much of it,
and so uniform in its level prairie lay.
I do think the soil of Canada as a
rule equals, if not excells, the finest
prairie farm lands of Indiana. These
lands are immense in their richness,
and when once the sod is rotted and
pulverized, it is as pliable and as
easily cultivated as Indiana sandy
soil.
Western Canada, from my point of

western Canada, from my point of view, offers as fine opportunities for mixed farming as any place in my knowledge. The long sunshiny days, together with the rich soil producery fine wheat, oats, barley, flax and other ceroal products. There is scarcely any attempt to raise corn, except early varieties for table use. The season is too short to depend upon maturing field corn. From the standpoint of getting this land ready for the plow, I must say that I never saw such a vast extent, practically all ready, so all that one has to do is to hitch up the plow and go to work. This is not the case with all the Canadian land, however; some of it has quite a bit of timber, much of it may be called brush land and some of it has lovely forest groves, dotted here and there, thereby covering a hundred and sixty acres.

I have no doubt but that this country excels as a grazing or ranchir, country, because they have such rich grass, having and abundance of rain to keep it fresh. They also have plenty of water streams, and as a rule water may be reached at a depth of from twenty to forty feet. From this you see there can be plenty of hay mown for winter feeding, and have had reliable farmers to tell that their stock will, freed on hay alone, and be ready for market in the spring. Upon inquiring about the expense of raising a steer, a farmer repiled that he did not consider it would cost any more than \$4.00 or \$6.00 to develop a three-year-old steer.

I truly think Canada offers a fine opening for a young man or a man who is renting land in Indiana. One hundred and sixty acres of good land for \$10.00. This land can be hought from the railroad companies, private corporations or the Government for \$3.00 to \$4.00 per acres. Green believe that for a series of years (five) a young man can make \$10.00 in Canada, whereas he would only make \$1.00 here, and I feel sure that I spent more money to get my eighty-acre farm in White County, Indiana, cultivated, than it would cost not cultivate eight hundred acres in Canada. This

than it would cost me to cultivate eight hundred acres in Canada. This may seem a strong view to take of the matter, but when you take into consideration the clearing, ditching, fencing and the expensive breaking in of the stumps, and then compare the expense to that of land needing only the breaking, you will conclude that it is not such a wild or exaggerated statement as you might at first think. I enjoyed the balmy, breezy atmosphere, which was bracing and refreshing, and the cool nights which made it so pleasant for sleep.

On making inquiries regarding the whiters in this country, I learned that the people never suffer from the cold, as the weather is dry and invigorating, and in a great many places farmers and herders allow their took to run outside the year round.

One great advantage to the settlers in Western Canada is the free creameries established by the Government, and run exclusively in the interest of the farmer.

I visited Thomas Daley, a farmer near Edmoton, Alberta, who showed me oats he had raised, some of which took the first prize at the Paris Exposition last year. The same yielded 110 bushels to the acre in 1859.

Yours truly,

FRANK FISHER,

Mexico, Ind.

FRANK FISHER

Mexico, Ind.

By the advice of eminent oculists, the authorities of Munich have decided no longer to use gas or petroleum for lighting school rooms.

Mrs. Winslow's Soothing Syrup for children teething, soften the gums, reduces inflamma-tion, allays pain, cures wind colic. 25c a bottle

Times must be pretty hard when a man can't even collect his thoughts. I do not believe Piso's Cure for Consumption has an equal for coughs and colds.—John F. Boren, Trinity Springs, Ind., Feb. 15, 1900.

Taking everything into consideration the suspension bridge without a pier.

USE OF RAW HIDE.

Cogwheels Made of It, and Mallets and Mauls and Many Other Things.

Mauls and Many Other Things.

"One of the most curious of the
many things made nowadays of rawhide," said a man who handles such
articles in his business, "is the raw
hide pinion, or cogwheel. You might
think that the teeth of such a wheel

articles in his business, "is the raw hide pinion, or cogwheel. You might think that the teeth of such a wheel would break down and wear off quicker than those of an iron wheel, but as a matter of fact they do not break, and a rawhide pinion will wear as long as an iron pinion, if not longer. "Such pinions are made of many layers of rawhide pressed solidly together, and bolted through and through to metal plates placed on the sides. The teeth cut across the face of the wheel thus formed are, of course, each composed of many layers of the thoroughly compacted rawhide standing edgewise.

"Rawhide pinions are used for many purposes. One of their great advantages is found in their noiselessness. They are used in machine shops against iron gear, so as to make less noise; they are used for motor pinions on street railway cars, and so on.

"Another rather curious though now somewhat common use for rawhide is in the making of mauls and mallets having heads of rawhide, and hidefaced hammers. These are put to a great variety of uses, as for pounding on dies and punches and on polished metal surfaces.

"Rawhide is used for bell cord in street cars, for all manner of straps and for shoe and boot laces. It is used in the manufacture of artificial limbs, and for trunk handles and for trunk binding, for washers, for many sorts of harness and saddlery goods, and for whips and larlats, and not the least of lits uses is in the manufacture of various kinds and all sizes of belting."—

New York Sun.

Immense Distances.

South Africa is a country of immense distances, and it is interesting, for the purpose of realizing its area, to recall the great extent of the railway systems. In the Cape Golony the open mileage of the Cape Government railways is about 2000 miles, with 360 miles under construction, and 350 miles of privately owned lines. In Natal there are upward of 600 miles open, and short extensions, totalling sixty miles, on the north and south coasts, and between Dundee and Vryheid, under construction. In the Transvaal Colony there are \$90 miles open to traffic and 200 miles under construction, exclusive of the Veereniging-Rand line. The Orange River Colony possesses about 400 miles of open mileage, and about 100 miles under construction. Rhodesia, although only a decade old, already possesses about 1600 miles of open railway, and its three main sections under construction—the Buluwayo-Zambesi, Buluwayo-Salisbury and Buluwayo-Tuli—aggregate about 600 miles. Altogether the open mileage in South Africa amounts to upward of 5000 miles, with at least 2000 miles under construction. The figures are exclusive of the projected extensior. A Submarine Dwelling Place.

According to a London newspaper a submarine dwelling is going to be built by a well-known Marseilles firm for the Countess de Montagne; and the experiment is an especially inter-esting one, for should it prove successthe experiment is an especially interesting one, for should it prove successful the solving of the submarine probhem will have been intimately bound
up with a latter-day romance. The
Countess is said to have become weary
of the world and that society in which
she was a brilliant leader, and to have
made up her mind that she will renounce the ordinary pleasures of life.
So, having plenty of money and the
gift of invention, the Countess is busy
preparing to seek seclusion beneath
the surface of the Mediterranean in
the submarine dwelling she is having
built. The Countess knows that the
gossips of the Paris boulevards, when
they relate her story, call her Le
Mystere, hence she his given her boat
that name.

World's Smallest Watch.

## World's Smallest Watch.

A watchmaker at Zurich, writes a Geneva correspondent, is exhibiting in his shop window a wonderful piece of Swiss workmanship in the shape of the smallest watch that has ever been manufactured.

manufactured.

The watch, which is in the shape of a rose, is so minute that a strong magnifying glass is necessary to read the hands, and when winding up the tiny article it is necessary to use a specially prepared contrivance for this purpose.

purpose.

The manufacturer refuses to sell the watch, which keeps excellent time. One rich customer offered \$1000 for the curiosity, but this sum was refused.

An Unanswered Prayer.

"I have been teaching my children something of the power and usefulness of prayer," said the happy mother of three fine youngsters. "I thought little Bobble had grasped the idea in spite of the limitations of a mind three years old. His faith is saily shaken because his first request was not granted. Loking devoutly toward the heavens he asked:

"Please, Dod, frow down a moocow."

Under the will of the late James Toleman, of London, the sum of \$1,-250,000 is bequeathed to charity, and an absolutely free hand in its distri-bution is given to the executors.

Dr. Carl Peters asserted in London that he had definitely proved by his discoveries on the Zambesi that Egypt civilized Central Africa 2000 years B. C.

# Black Hair

"I have used your Hair Vigor for five years and am greatly pleased with it. It certainly re-stores the original color to gray hair. It keeps my hair soft."—Mrs. Helen Kilkenny, New Portland, Me.

Ayer's Hair Vigor has been restoring color to gray hair for fifty years, and it never fails to do this work, either.

You can rely upon it for stopping your hair from falling, for keeping your scalp clean, and for making your hair grow.

If your druggist cannot supply you, send us one dollar and we will express you a bottle. Be sure and give the name of your nearest express office. Address, J. C. AYER CO., Lowell, Mass.

# A Bad Breath

A bad breath means a bad stomach, a bad digestion, a bad liver. Ayer's Pills are liver pills. They cure constipation, biliousness, dys-pepsia, sick headache. 25c. All druggists.

Want your moustache or beard a beautiful brown or rich black? Then use BUCKINGHAM'S DYE for the

## Cotton Plantations.

For many generations after the first bale of cotton raised in the United States was sent to market most of the cotton plantations of the country were east of the Mississippi. But now near-ly one-half of the entire American crop of cotton comes from the terri-tory west of the river.

We refund 10c. for every package of PUT-NAM FADELESS DYR that falls to give satisfac-tion. Monroe Drug Co., Unionville, Mo.

The shortest terms of Governors are in Massachusetts and Rhode Island — one year each.

It's the hard rubs of the world that make a man bright.

make a man bright.

There is more Catarrh in this section of the country than all other diseases put together, and until the last few years was supposed to be incurable. For a great many years doctors pronounced it a local disease and prescribed local remedies, and by constantly failing to cure with local treatment, pronounced it incured to the constitutional disease movem entarch to be a constitutional disease, now of the constitutional disease, and constitutional cure on the market. It is taken internally in doses from 10 drops to a teaspoonful. It acts directly on the blood and mucous surfaces of the system. They offer one lundred dollars for any case if alies to cure. Send for circulars and testimated in the disease of the disea

South Dakota has more Indians (11,000) than any other State. Of the Territories Indian Territory has 56,000 and Arizona 25,000.

## Best For the Bowels.

Heat For the Bowels.

No matter what alls you, headache to a cancer, you will never get well until your bowels are put right. Cascaners help nature, cure you without a gripe or pain, produce easy natural movements, cost you just 10 cents to start getting your health back. Cascaners and the cast getting your health back. Cascaners, the genuine, put up in metal bowels and the start getting the start getting the start getting the start getting your health back. Cascaners of the start getting the

The longest State is California (770 miles; the widest, Texas (760). The next in breadth is Montana (580).

Frey's Vermifuge Eradicates worms. It cures. 25c. Druggists or by mail. E. & S. Frey, Baltimore, Md.

The area of Texas is 266,000 square miles; of Rhode Island, 1247.

FITS permanently cured. No fits or nervous-ness after first day's use of Dr. Kline's Great Nerve Restorer. \$2 trial bottle and treatise free Dr. R. H. KLINE, Ltd., 931 Arch St., Phila. Pa.

The girl who is lost in admiration easily finds herself in love.

Brooklyn, N. Y., Sept. 16th.—The Garfield Tea Co., manufacturers of Garfield Tea, Gar-field Headsohe Powders, Garfield-Tea Syrup, Garfield Relief Plasters, Garfield Digastive Tablets and Garfield Lotion, are now occupy-ing the large and elegant office building and laboratory recently erecised by them. For many years the Garfield Remedies have been growing in popularity and their success is well deserved.

From 1890 to 1900 the population of Nevada fell from 45,700 to 42,300; the population of Oklahoma increased from 61,800 to 398,200.



"The Cradle Rules the World"

and all wise mothers make

St. Jacobs Oil

Conquers Pain

### An Error of Nature.

Among the more interesting exam-ples of uncommon British birds at the ples of uncommon British birds at the London Zoo is a crossbill, that seed-acting fowl which Buffon stigmatized as being "an error and a defect in nature." But Buffon only dwelt upon the odd way in which the upper and lower beak cross each other obliquely, and was not aware that this apparently deformed bill is exceedingly serviceable in extracting tile seeds of apples and pines, upon which the crossbill chiefly feeds. The specimen at the Zoo is of a greenish yellow hue, but the full-dressed male bird is bright red, which color, together with its crossed bill, has been explained in a mediaeval legend as due to its attemps to draw out the nails from the cross.

### Russia a Land of Uniforms.

If anything Russia excels even Ger-If anything Russia excels even Germany in the matter of uniforms. On the sidewalks of any of the large cities, and more especially at railway stations, it is safe to assert that at least 25 per cent. of all male adults are in uniform. It is a puzzle to the tourist to identify the bearers of such distinctive garbs, consequently the different branches of the Government service are often wrongly interpreted. The gaudy uniform does not always indicate a high official, as an officer of high rank may appear in a plain uniform and one of low rank not infrequently parades the streets with more fuss and feathers than his commander.

In the time of Pliny, silk was supposed to be a vegetable product and his "Natural History" contains a long story of the way in which it was picked from trees in the East Indies and spun and woven into fabrics.



For Mre Than 19 SHOES \$ 3.50

For Mre Than 19 SHOES \$ 3.50

For Mre Than 19 SHOES \$ 3.00

And \$5.30 shoes for style, comfort and wear has excelled all other makes sold at these prices. This excellent reputation has been won by merit alone. W. L. Douglas shoes must be maintained. The standard has slaways been placed so high that the first shoes must be maintained. The standard has always been placed so high that the first shoes must be maintained. The standard has always been placed so high that the first shoes when the shoes must be maintained. The standard has always been placed so high that the first shoes than he can get elsewhere.

W. L. Douglas sells more \$3.00 and \$3.50 shoes than any other two manufacturers.

Shoes than any other two manufacturers.



Fast Color Kyrlets uned.

Fast Color Kyrlets uned.

Fast Color Kyrlets uned.

Fast Color Kyrlets uned.

Fast Color Kyrlets uned. MORE THAN HALF A CENTURY OUR GUARANTEE ARE BACK OF EVERY WATERPROOF CILET WATERPROOF CILED SLICKER OR COAT BEARING THIS TRADE MAIN COWER'S ON SALE EVERYWHERE SHOWING FULL LINE TO SHE BRAND A.J.TOWER CO., BOSTON, MASS. 41

ASTHMA-HAY FEVER DR. TAFTS ALENE SEND FOR SEND FOR FREE TRIAL BOTTLE
ADDRESS DR. TAFT, 79 E. 130 T. ST., N.Y. CITY

\$900 TO \$1500 A YEAR

We want intelligent Men and Women as Traveling Representatives or Local Managers; salary Spac to 18to a year and all expenses, according to experience and ability. We also want local representatives: salary Sp to 18to a week and commission, depending upon the time devoted. Send stemp for full particulars and Laie position preferred. Address, Dept. B. THE BELT, COMPANY, Philadelphia, Pa.

STAPK TREES best by Test—77 YEARS
FRUIT BOOK FRE. WE PAY VEST
WAST NORE SALESHEN PAY VEST
STARK ERO?, Louisians, No. Jimitsville, 4 lin, Ex DROPSY NEW DISCOVERY; rives guick relief and cures worst asset. Box of testimonials and 10 days' treatment free. Dr. K. H. GPERN'S BOX Box Ballands. 68.

MCILHENNY'S TABASCO. P. N. U. 38, 1901.

Best Cough Syrup. Testes Good. Use In time. Sold by drugststs. CONSUMPTION