### BELLS.

AN INTERESTING STORY ABOUT THEIR MANUFACTURE

The Biggest Bells in the Worldne Monster Czar Kolokol of Moscow—The Huge Bells of China and Japan.

Russia leads the world in the making of chimes, peals and church bells. In the city of Moscow alone, before the French Revolution, there were several hundred large bells, and many splendid oval, with its longest diameter at exactly ones have been added since. The simple fact that Russians regard the sound of bells not only as a holy summons to church, but also as a part of the very act | time varies directly as the square of thickof worship, accounts for their love of ness, and inversely as the bell's diameter. bells and their extravagance in procuring them. The Russians never tire of ringing their bells, and in Moscow the sounds which are produced on the Sabbath, without regard to harmony, are absolutely painful.

The "Great Belle of Moscow," or "Czar Kolokol" (emperor of bells) is by far the largest in the world. Its weight is about 440,000 pounds, and its cost in simple structural material was about York city recently, from that young \$300,000. To this were added precious republic. He is a bright young colored jewels and plate amounting in value to \$1,000,000 by the Russian nobles at the of information about his adopted country, time of the casting. The dimensions of this bell are twenty-one feet in height and twenty-two feet in diameter. It was cast | Grimes does not hesitate to point out deby order of the Empress Anne in 1734 fects in the Liberian Government when from the metal of a gigantic predecessor, he finds them. "The country is advancwhich had been greatly damaged, and is ornamented on the sides by several figures, one of which represents the Empress in flowing robes. The bell was ordinarily suspended from beams, which, being destroyed by fire in 1734, permitted the heated bell to fall to the ground and This is too often. The Government is break, since which time it has been The Emperor Nicholas had it raised in 1837 and placed upon a low are small, and men of ability prefer to circular wall in the Kremlin. It is now consecrated as a chapel, the opening in lucrative. But all this will be remedied its side being large enough to admit two men standing abreast. The bell is carefully guarded, and the Russians will not allow a particle of it to be carried away.

The cathedral of Moscow has another monstrous bell weighing 120,000 pounds. It is suspended in the tower of Ivan rapidly. We need better means of trans-Veliki, and when it is rung, three times a year, all the other bells are silent. The ringing is said to produce a trembling effect throughout the city. In the same tower are forty other bells, each of which weighs many tons. The bells of can enterprise. Concessions for railroads Russia are fixed, immovable, to their could be obtained, and legitimate investbeams. Their tongues are slung by ments would find good returns. There means of leather bands, and are moved are no revolutions to be feared. The by ropes drawn in such a manner as to people are peaceable and law-abiding." cause the blows to fall on the surface at three points directly opposite to each other.

The bells of China rank next in size to can be seen enormous bells lying on the ground, their weight having broken down the towers in which they were suspended. The bells are of excellent workmanship and are adorned with inscriptions inside and outside. They are good shape. The dulness of their sound is increased by the fact that they are struck with wooden mallets instead of iron clappers. The great bell of China, in Pekin, weighs 120,000 pounds. It is fourteen feet high and twelve inches in diameter. In Nankin there is a bell, now lying on the ground, which weighs 50,000 pounds.

In Japan there are many large bells. They are of the same shape and composition as those in China, and are by no means musical. They are suspended in low towers near the temples, and are sounded by means of wooden beams swinging from the roofs, to which straw Well, the hide is cut into circular attached. The bells of Holland and the neighboring countries come next in point of size. They are hung about every church and public building in endless variety, and as the people are exceedingly fond of the tone of bells, they are never left at rest. In some cases a single tower contains not less than fifty bells.

Here is a partial list of the biggest inch. bells in other countries: In Vienna and That piece hanging outside is worth \$75 Olmutz there are two bells weighing each 40,000 pounds. A bell in Rouen, weighs 36,000 pounds. The France, largest bell in Westminster, England, weighs 30,000 pounds; one in Erfurt, Germany, the same weight; one in Notre off. But not for the finest work Dame Cathedral, Paris, 30,000; one in St. Peter's, Rome, 17,000; the "Great Tom" at Oxford, 17,000; one at Rennes, France, 16,000; the Jacqueline, Paris, cast in A. D. 1400, 15,000; the "Great pense. The manufacturer can use leather Tom" of Lincoln, Eng., 12,000; and the which will cost him one-tenth as much bell of St. Paul's, London, 11,500. 'The But the leather will wear out much weight of the bells in the United States falls considerably below these figures, although in tone they are, perhaps, better.

about the same in all ages, namely copper and tin, the proportions alone being cheap after all .-- New York Mail and Ex-And the experience of ages Pres has shown that those are the only capable metals of producing a proper ringing gobble up our dry goods trade. alloy. Iron and steel and sometimes gold and silver have been put into the composition of bells as an experiment, but solely his first inauguration.

to the injury of the tone. Iron and steel have been found the least suitable, owing to the harsh, disagreeable sounds which they alone are capable of producing, while silver and gold, incapable of producing the full, clear tones requisite in a People talk of the 'silver tinkling bell. of a bell.' Now, the fact is that if a bell were made of silver there would be very little tinkling.

The tone of a bell is the result of its vibrations. When struck a bell changes shape, and these changes constitute the vibrations. At one moment a bell is an right angles to the position of its longest diameter at the preceding instant. The number of vibrations in a bell in a given or as the cube root of its weight. The number of changes which can be played upon a chime of bells is wonderful. Twelve bells will allow no less than 479, 091,600 changes .- New York Commer cial Advertiser.

### Men and Things in Liberia.

Henry W. Grimes, ex-Attorney-General, of Liberia, Africa, arrived in New man, a West Indian by birth, and is full to which he is warmly attached. Bu while enthusiastic about its future Mr. ing steadily," he remarked, in discussing its affairs, but the people are ahead of the Government. Our Government, as you are perhaps aware, is modeled after that of the United States, only we elect a President every two years instead of four. hampered also from the lack of good, able men as public officials. The salaries engage in other pursuits that are more in time, of course.

"The country is improving rapidly in agriculture. Over 1,000,000 pounds of coffee was exported from our county, Montserrade, last year. Our exports of ginger, arrowroot, etc., are increasing portation, though, very much. The roads are poor and there are no railroads whatever. Nearly all transportation is by water, and this is slow, toilsome and expensive. There is a fine field for Amer-

In answer to a question about the progress of Christianity, Mr. Grimes replied "It is not gaining ground as rapidly as I should like to see it. The Mahometan those of Russia. In many parts of China missionary is more successful. He comes into a village with perhaps nothing but mat. On this he sits and instructs people that there is one God and Mahomet is His prophet.

"The climate is healthful, the tempera ture ranging between seventy and eighty of inferior tone, however, and not of a degrees, seldom over ninety degrees .-New York Tribune.

# Tanned Walrus Hide.

A busy shop of the lower part of the town displays hanging from its door post a full walrus hide. It is tanned to a color of a light dirt brown and in the inequalities and furrows of its surface somewhat resembles alligator skin. To an inquiry or two a young gentleman responded:

"That walrus hide is hanging there

waiting to be cut up into pie ces. Jewelry manufacturers use it for polishing. You know the scheme of an emery wheel? shapes and used in just the same way. These circles are cut every size as the manufacturing people order. The wheels, as completed, are often of three or four thicknesses of material. But that, of course, depends on the thickness of the hide itself, which runs from an eighth to a third of an The hide is sold by weight the price being \$2.50 a pound. Is the walrus hide wheel always used for the polishing of jewelry, do you say? Well, yes, if the manufacturer knows when he is well or the final polishing. The felt wheel comes in then. For the ordinary polishing, however, walrus hide is certainly the best. The objection to it is the exquicker, it won't do such good work, the workman must spend a great deal longer time in polishing to produce any The composition of bells has been thing like the same results. So in the long run walrus hide is nearly as

An English syndicate is now trying to

Grant was the youngest President at

### CURIOUS FACTS.

Cornell University has no holidays but Sundays.

New York law still permits imprison ment for debt.

Desertion from the army or navy/is not

Bull fighting is getting a foothold among French amusements.

an extraditable offence.

Swallows are being trained in France to act as carriers of dispatches in case of war.

An Englishman of letters wears con stantly round his neck a portion of Shellev's charred skull.

Dartmouth is credited with publishing the first college paper, Yale the second, and Union the third.

James Horner, the wealthy Pittsbug manufacturer, has a remarkable collection of cacti. One plant in his collection is valued at \$500.

Charles F. Pfluger has just arrived in this country from the Hartz Mountains. Germany, with 1000 singing birds, which are to be turned loose in Portland, Oregon, and vicinity.

The largest university in the world is at Vienna, with 5200 students and 285 professors; while the largest college is at Cairo, Egypt, having 300 professors and 10,000 students of Mohamet.

The Burmese believe that the ruby ripens like fruit. They say that a ruby in its crude state is colorless and as it grows older turns yellow, then green, then blue, and lastly, a brilliant red.

There is no national bank in Switzerland, but there are thirty-three chartered banks. The Government has a system of loaning money to the people at interest, the details of which we do not know.

From the Egyptian manuscripts owned by the Austrian Archduke Rainer it appears that printing with movable types was practiced in Egypt in the ninth century of our era, and that a paper factory existed in Bagdad as early as 794.

Bartholdi, who modeled the celebrated statue which bears his name, also created the wonderful fountain in the Botanical Gardens at Washington. It is so large and requires such an enormous quantity of water that the authorities permit it to play only on rare occasions.

Mme. Euphrosyne Leblanc, who has just celebrated her centennial birthday in Nova Scotia, has had 11 children, 105 grandchildren, 222 great-grandchildren and 19 great-great-grandchildren. Most of them are living. She claims direct descent from Longfellow's Rene Blanc.

The Sultan of Turkey mantains 474 carriages which incur an expense of 2,300,000 francs a year. Most of these carriages are of French make. A few made in Turkey show cleverness in construction. The Sultan personally has use for only about four of the vehicles referred to.

The Salvation Army has a new method of advertising itself in Paris. An open carriage is daily hired and in it are placed four of the most conspicuous members of the con-fraternity-a North American Indian, a Chinaman, an Egyptian and a Persian. These are driven wherever the crowd is greatest.

The most remarkable roof in Danbury, Conn., or perhaps in that State, covers a greenhouse at the nursery of J. H. Ives. It is composed of negatives from the photograph galleries of E. R. Ritton. Mr. Ritton had at one time 20,000 of these negatives, the accumulation of the long years he has been in the business.

Many years ago while a circus was showing in Gorham, Me., the clown, whose name was Reynolds, was thrown from a horse and killed. He was buried in the Gorham cemetery, and it is said that since that time, whenever a circus as visited the town it has been made the custom for the company to visit the clown's grave and strew flowers on it, while the band plays a dirge.

# Watch Screws.

It is asserted that the smallest screws in the world are those used in the production of watches. Thus, the fourth jewel wheel screw is the next thing to be invisible, and to the naked eye it looks like dust; with a glass, however, it is seen to be a small screw, with 260 threads to the inch, and with a very fine glass the threads may be seen quite clearly. These minute screws are 4-1000th of an inch in diameter, and the heads are double; it is also estimated that an ordinary lady's thimble would hold 100,000 of these screws. No attempt is ever made to count them, the method pursued in determining the number being to place 100 of them on a very delicate balance, and the number of the whole amount is determined by the weight of these. After being cut the screws are hardened and put in frames, about 100 to the frame. heads up, this being done very rapidly by sense of touch instead of by sight, and the heads are then polished in an automatic machine, 10,000 at a time. The plate on which the polishing is performed is covered with oil and a grinding compound, and on this the machine moves them rapidly by reversing motion.

### Northern Hemp Culture.

Northern Hemp Culture.

The subject of hemp culture is drawing the serious attention of farmers in the Northern States. At present hemp is chiefly grown in Kentucky, Missouri and Tennessee, or on the rich bottom lands. Recent occurrences in the jute bag trade have drawn attention to the culture of our rative product. culture of our native product. Hemp Hemp will make a core for busing gaing will strong enough, and hempen bagging will cover cotton bales as well as that made from jute. The culture of hemp and its manufacture into bagging and twine manufacture into bagging and twine will be a double gain; we shall have the will be a double gain; we shall have the material and have the money formerly sent abroad for these materials. A few years ago the Dutch farmers of Eastern Pennsylvania grew the flax, which was spun and woven by their wives and daughters into grain bags, wagon covers and domestic sheeting; and there are few more thrifty people than these same farmers. One of these coarse linen bags was good for twenty-five years' service farmers. One of these coarse linen ongs was good for twenty-five years' service without repair, which is ten times that of the flimsy gunny cloth and cotton bags now in use. It is to be hoped that the culture of hemp, and its manufacture, may be largely increased.—New York Times.

#### Edible Menu Cards.

The latest thing in hotel bills of fare is an edible menu card. You select the dishes you want, and then while waiting for them you amuse yourself by leisurely sating up the bill of fare, it acting as and up the bill of lare, it acting as an appetizer. It is the scheme of a London confectioner. He makes a thin sheet of sweetened dough, and after it has been baked he prints the menu upon ti ni ink made of chocolate. It hasn't got over here yet, but it will by and oy.—St. Louis Globe-Democrat.

#### Currency in a Cur.

A dog, owned by Peter Flynn, of Red Hook, N. Y., recently chewed up and swallowed a \$2 bill. As the dog had no commercial value, he was killed, and the fragments of the bill, including the piece which bore the number, were recovered. The remains of the dog were buried, and the remains of the bill were forwarded to the Treasury Department at Washington. A new bill was duly re-turned to Flynn.—New York Herald.

What wrought the change? This woman's

What wrought the change? This woman's face
Is raddy with a rose's grace.
Her eye is bright,
Her eye is bright,
Her heart is light,
Ah, truly 'lis a goodly sicht.
A few brief months ago her cheek
Was pallid and her step was weak.
"The end is near
For her, I fear."
Sighed many a friend who held her dear.
I can tell you what wrought the change in her. She was told by a friend, who, like her, had suffered untold misery from a complication of female troubles, that Dr. Pierce's Favorite Prescription would certainly cure her.
This friend "knew whereof she spoke," for she had been cured by the remedy she advised her friend to use. She is enthusiastic in its praise, and tells her friends that Dr. Pierce deserves the universal gratitude of woman-kind for having given it this infallible remedy for its peculiar allments. It is guaranteed to give satisfaction in every case or money refunded.
Dr. Pierce's Pellets, one a dose. Cure head-

Dr. Pierce's Pellets, one a dose. Cure head-ache, constipation and indigestion.

It is said that profanity is never heard in Japan.

Ever since 1864 there have been women (more each year) who claim that there is no soap half as good, or as economical as Doobins's Electric. There must be some truth in their claim. Try it, see how much. Your grocer has it.

THE Dominion of Canada has a population of 5,250,000.

of 0,220,000.

This is the age of wonders, and the average American citizen is no longer surprised at anything. If you want to experience that sensation, however, just write to B. F. Johnson & Co., 1009 Main St., Richmond, Va., and hear what they have got to say of the success of some of their agents. They have got the goods that sell, and any one out of employment will consult their own interests by applying to them.

A pocket match-safe free to smokers of "Tansill's Punch" 5c. Cigar.

If afflicted with sore eyes use Dr. Isaac Thompeon's Eye-water. Druggists sell at 25c. per bettle

# Weak and Weary

cribes the condition of many people deb the warm weather, by disease, or over ood's Sarsaparilla is just the medicine needed to erecome that tired feeling, to purify and quicker e sluggish blood and restore the lost appetite. It u need a good medicine be sure to try Hood's

Sarsaparilla.

"My appetite was poor, I could not sleep, had headache a great deal, pains in my back, my bowels did
not move regularly. Hood's Sarsaparilla in a short
time did me so much good that I feel like a new
man. My pains and aches are relieved, my appetite
mproved."—George F. Jackson, Roxbury Station,

# Hood's Sarsaparilla 100 Doses One Dollar

FARMS Do you want to buy or sell ? LANDS If so send stamp for circ'l'r to LANDS Curtis & Buffett, 233 Broadway, N. Y. \$25 AN HOUR made by our Agents MEDICAL CO., Richmond, Va.

**JONES** m Boy for JONES OF BINGHAMTON, BINGHAMTON, N. Y.

JOSEPH H. HUNTER, PESSION WITHOUT DELAY

ODANIA GALESKIS US

OPIUM HABIT

MORTHERN PACIFIC.
LOW PRICE RAILROAD LANDS &

FREE Covernment LANDS.

MILLIONS of ACRES of each in Minnesots, North Dakota, Montena, Icaho, Washington and Oregon SEND FOR Publications with Maps describing the ber Lands now over 15 Sections, San Commissioner CHAS, B. LAMBORN, St. Paul, Minn

AGENTS wanted. \$1 an hour. 50 new varieties. Catalogue and sample free. C.E.Marshall, Lockport, N.Y

PEERLESS DYES ATO the BEST.

and Whiskey Hab-ttacured at home with out pain. Book of par-ticulars sent FREE. B. M. WOOLLEY, M.D. Atlanta, Ga. Omco 65% Whitshall St.

DUTCHER'S

FLY KILLER

Makes a clean sweep. Every sheet will kill a quart of files Stops buzzing around ears diving at eyes, tickling you nose, skips hard words and se cures peace at trifling expense

 ${f W}$ . L. DOUGLAS \$3 SHOE GENTLEMEN

'n snow and on the state of the state of the same of the same to get full value for your money. Thousand sure to get full value for your money. In or carers of W. L. DOUGLAS' SHOES, In or care of W. L. DOUGLAS' SHOES, In or care that is not deformed, a state that is not deformed, as

W. L. DOUGLAS' name and the price are stamped on the bottom of all Shoes advertised by him before leaving his factory; this protects the wearers against high prices and interior goods. If your design does not keep the style or kind you want, or ofters you

EASY DRAFT, DURABILITY & QUANTITY OF WORK

page pamphlet A. W. GRAY'S SONS, PATENTERS AND SOLE MANUFACTURES. MIDDLETOWN SPRINGS, VT.

GOLDANDSILVER

FOR 25 cts. We will send.

from 20 different mines in Colorado. Address
Rocky Mountain Specimen Co., Denver, Colo

DR. KORHLER'S FAVORITE COLIC MIXTURE to all domestic animals, will cure 99 out of every 100 eages of colic when

or spasmode. Rarely more than 1 or 2 does necessary. It does not con-e, inther acts as a laxative and is entirely harmless. After 20 years of trial tethna (00 cases, our guarantee is worth senething. Colle must be edpremptly. Expend a few cents and you have a cure of band, read \$\frac{2}{3}\$ Cithiff or 1 miles to the content of the c

s hen needed, and perhaps save a valuable horse. If not a your druggists, ence to cents for sample rottle, sent prepaid.

J we Dr. Kochler's "Javovit Colic Wecherer" "job doing with success. It is "Favorite Colic Mixture." Would not be the best colic note between the land of the colic Mixture. Would not be the best colic note between the land of the colic Mixture. Would not be the best colic note between the land of the colic mixture. Would not be the best colic note between the land of the la

th prices and the style or kind and says tamped on them, and says ory, for you can get what y shoes that are not warrant he those that have

Dr. Lobb, 328 N. 15th St.
PHILA., PA.

I prescribe and fully endorse Big G as the only specific for the certain cure of this disease.

G. H. INGRAHAM, M. D., Amsterdam, N. Y.

D. R. DYCHE & CO., Chicago, Hr. S1.00. Sold by Druggists

PENNYROYAL PILLS,

\$5.000 will be paid to any person who will prove the above statements to be untrue. The Following Lines will be found to be of the same quality of excellence:

\$5.00 SHOE GENUINE HAND-SEWED, which takes the place of custom-made shoes that cost from \$7 to \$9.

\$4.00 SHOE THE GRIGINAL AND ONLY HAND-SEWED WELT S4.

\$3.50 SHOE FOR POLICEMEN, Railroad Men and Letter Carriers all wear them smooth inside as a Hand-Sewed shoe. No Tacks or Wax Thread to hurt the fee \$2.50 SHOE IS UNEXCELLED FOR HEAVY WEAR. Best Calf Shoe for the price.

\$2.00 SHOE IS EQUAL TO SHOES THAT COST FROM \$3 TO \$3.50.

\$2.00 SHOE FOR BOYS is the best School Sh

W. L. DOUGLAS, Brockton, Mass.





To clean tombstones To polish knives. To whiten marble.

Painters to clean off surfaces. Cooks to clean the kitchen sink.

To renew oil-cloth. To scrub floors. To clean dishes.

Households to scrub the marble floors, Chemists to remove some stains. Carvers to sharpen their knives. Shrawd ones to scour old straw hats. Artists to clean their palettes. Renovators to clean carpets.

Dentists to clean false teeth. Surgeons to polish their instruments. Confectioners to scour their pans. Mechanics to brighten their tools. Hostlers on brasses and whit Soldiers to brighten their arn Wheelmen to clean bicycles.

EVERYBODY USES IT. EVERY ONE FINDS A NEW USE. Engineers to clean parts of machines. Ministers to renovate old chapels. Sextons to clean the tombstones. Hostlers on brasses and white horses.

GENTILEMEN

Is a fine seamless caif shoe, with Dongola tops and
Oak Leather bottoms. They are made in Congress,
Buttom and Lace on London Cap Toe. Narrow Cap
Toe and Plain French Toe Lasts, in sizes from 5 to
I, including half sizes and in all widths. If you
have been paying from \$5 to \$6 for shoes of this
quality do not do so longer. One pair will wear as
long as two pairs of common shoes sold by deaders
that are not warranted by the manufacturer.

Our claims for this shoe over all other \$5 shoes advertised are.

3d. It is more stylish, better fitting and durable.

3d. It gives better general satisfaction.

4th. It costs more mouey to make.

5th. It saves more money for the consumer.

6th. It is sold by more dealers throughout the U. S.

7th. Its great success is due to merit.

8th. It cannot be duplicated by any other manufacturer.

Sth. It cannot be say in the world, and has a larger demand than any other \$3 shoe advertised.

\$2.25 SHOE WORKINGMAN'S. Is the best in the world for rough wear; one pair

\$1.75 SHOE YOUTH'S SCHOOL, gives the small boy a chance to wear the best

W. L. DOUCLAS \$3 AND \$2 SHOES FOR LADIES.

Both Ladies' Shoes are made in sizes from 1 to 7, including half sizes, and B, C, D, E and EE widths.

"The French Opera," "The Spanish Arch Opera," "The American Common Sense,"

"The Medium Common Sense," All made in Button in the Latest Styles. Also French
Opera in Front Laces, on \$3 Shoe only.

Consumers should remember that W. L. DOUGLAS is the largest and only Shoe Manufacturer in the
world supplying shoes direct from factory, thus giving all the middle-men's profits to the wearer.