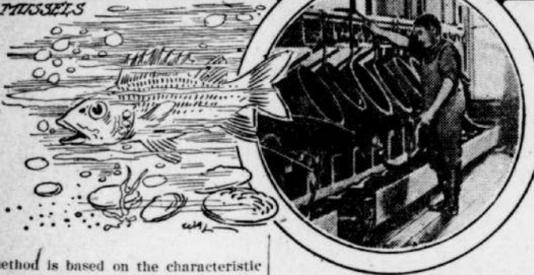
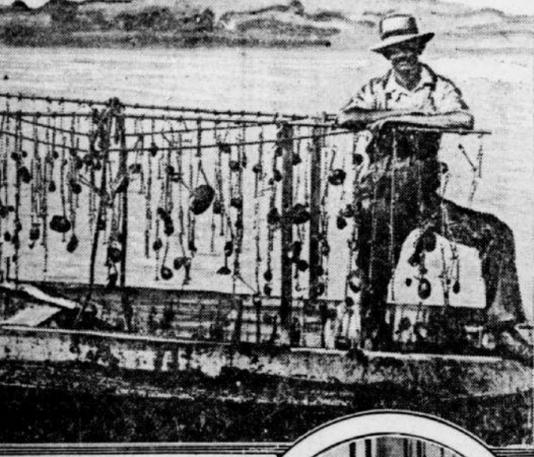


# Billions of Buttons

By Robert N. Moulton



ROLLING CHURNS

method is based on the characteristic habits of the fresh-water mussel, which he habitually half imbedded in the bottom of a stream, with the hinder end of the shell directed against the current and slightly gaping. If a stick or hook be inserted into the opening of the shell, the mussel at once closes tightly and will hold for a long time, even while being dragged over the bottom and hauled up to the boat.

The more elaborate apparatus now used was first brought to the notice of the river men of the upper Mississippi in 1897. The crowfoot apparatus consists essentially of a bar to which many short lines, bearing four-pronged wire hooks, are arranged at intervals. By means of a towing line the bar is dragged above the bottom, while the hooks trail on the mussel bed with the current. When a hook enters a shell opening, the mussel closes upon the hook, and in consequence is dragged from the bottom. When the bar is raised after a suitable time, numerous mussels may be hanging from the hooks.

It is usual to equip barges with a number of these bars so that the bed of a stream may be dragged thoroughly. The most satisfactory boat has been found to be the ordinary john boat. Its length is from 14 to 20 feet, with a width at the center of from 3 to 5 feet, but it always has narrower ends, and is usually of light draft. For work on a much larger scale, heavy barges, approximately 10 by 40 feet, are used.

After the mussels are brought ashore the soft parts must be removed. Where pearling is the exclusive object, each mussel may be opened with a knife inserted between the valves of the shells, so as to sever the adductor muscles; the meat is then cut out and examined for pearls. Such a process, however, is entirely too slow and tedious for preparing shells for market, so the cooking-out process is exclusively employed in the shell fishery. The mussels are cooked in a vat 5 feet long by 2 feet wide and from 12 to 18 inches deep. This usually takes about a half hour.

After reaching the button factory the shells are first soaked in tanks or vats for a week or more. The soaking process is intended to soften the material, which would otherwise be too hard on the saws, as well as so brittle as to chip and yield blanks with rough edges. The machine used in cutting is essentially a lathe fitted with a tubular saw of the necessary diameter to obtain the required size of button, and a wooden plug and a ratchet handle or lever for gradually forcing the rough shell against the rapidly rotating saw. The shell is held in position either by pegs or by the hand protected with a mitten. Successive blanks as they are cut are crowded through the tubular saw to fall into a receptacle below. The sizes of the buttons are determined by the inner diameter of the

## To Sail Globe in a Lifeboat

Three Norwegians Plan Interesting Trip That Will Take About Year and a Half.

### ALL ARE TRAINED SEAMEN

Boat Will Have No Covering Except Canvas Awning to Spread Over the Bunks When It Rains—Boat to Be Sloop Rigged.

New York.—Norwegians are no longer the leading sea rovers they once were, but their adventurous spirit is not yet extinguished. There is a round tower at Newport, built of rude stones, a lasting monument to some forgotten visitors to these shores. Who built it no one can tell, but surely not aboriginal Americans for it embodies principles of architecture unknown to them. Anthropologists believe it was built by the Norsemen, who, there is evidence to show, found America long before Columbus, as early as the Tenth century. Indeed there is a Norse tradition to that effect.

### Adventurous Norwegians.

These considerations are revived by the fact that three young Norwegians now in this city are planning to cross the Atlantic ocean in an open boat and eventually to circumnavigate the globe. They are Capt. Mimer Tønning and Mates Othar Pettersen and Helge Westerling. Tønning was at work on the Panama canal in 1915, but going home was impressed into the Norwegian navy. Pettersen was petty officer on another ship in the same service. Westerling has also seen much sea service. They are practically stranded here now, and are laid up at the club of the Norwegian Master and Mates' association, No. 565 Henry street, Brooklyn, where a reporter was told their plans. Tønning acted as spokesman while the other two listened and gave assent. Their plans are nearly complete. They have secured a 20-foot lifeboat, built by the Atlantic Life Boat company of South Brooklyn. It is a

gift from the company, and while it does not differ from the ordinary lifeboat built for ship use, certain changes have been made to adapt it for the specific purposes for which it will be used.

### Will Be Sloop Rigged.

It will be sloop rigged, having a 26-foot mainmast and a 12-foot topmast, three feet of which will be above the hounds, thus affording a 32-foot sail hoist. Two sets of sails will be carried, one of light canvas for light and moderate weather, and one of heavy canvas for stormy weather. However, they hope to escape stormy weather, except an occasional squall, by sailing in summer time. The boat will have no covering except a canvas awning to spread over the bunks when it rains. Cooking will be done on an oil stove. They will start with a stock for 14 weeks' provisions

## Bear and Rattlesnakes Upset Train Schedule

Elmira, N. Y.—New York Central train crews on the line that runs south from Corning into the coal fields of Pennsylvania are having a new experience. Black bears and rattlesnakes are interfering with the time schedules.

A special coal-laden freight train showed up when a huge black bear posed on the track in bad formation. It refused to move until the cowcatcher nosed it more or less gently aside.

In the hope of being able to cross the Atlantic within that time.

They will leave Sandy Hook in the near future and steer for the Seilly or Azore islands. From Gibraltar they will go to Suez, Sumatra, the Philippines, Hawaii, California, Panama, pass through the canal and come up the Atlantic coast to New York. The entire voyage is expected to take from 16 to 18 months.

## BETTER ROADS

### FUNDS FOR BUILDING ROADS

Sum of \$622,000,000 Available for Highway and Bridge Construction and Maintenance.

(Prepared by the U. S. Department of Agriculture.)

Approximately \$622,000,000 is now known to be available for road and bridge construction and maintenance during the year 1921, according to information sent to the bureau of public roads, United States Department of Agriculture, by the several state highway departments. Should pending legislation be passed by congress and additional appropriations be made for federal aid, this sum would be increased by the amount of the federal appropriation.

The approximate amounts available to each of the states from local, state,



Hard Surface Road Built by Federal and State Funds.

and federal sources for road and bridge expenditure are: Alabama, \$9,000,000; Arizona, \$8,000,000; Arkansas, \$12,000,000; California, \$23,000,000; Colorado, \$7,000,000; Connecticut, \$8,000,000; Delaware, \$3,500,000; Florida, \$7,725,000; Georgia, \$10,000,000; Idaho, \$4,500,000; Illinois, \$20,000,000; Indiana, \$9,500,000; Iowa, \$37,000,000; Kansas, \$20,000,000; Kentucky, \$8,000,000; Louisiana, \$6,000,000; Maine, \$7,500,000; Maryland, \$4,800,000; Massachusetts, \$8,000,000; Michigan, \$20,000,000; Minnesota, \$20,000,000; Mississippi, \$11,000,000; Missouri, \$15,000,000; Montana, \$8,500,000; Nebraska, \$6,000,000; Nevada, \$3,500,000; New Hampshire, \$2,500,000; New Jersey, \$16,000,000; New Mexico, \$4,000,000; New York, \$55,000,000; North Carolina, \$6,500,000; North Dakota, \$7,000,000; Ohio, \$25,000,000; Oklahoma, \$8,000,000; Oregon, \$10,000,000; Pennsylvania, \$20,000,000; Rhode Island, \$1,700,000; South Carolina, \$5,000,000; South Dakota, \$7,000,000; Tennessee, \$10,275,000; Texas, \$60,000,000; Utah, \$6,000,000; Vermont, \$2,000,000; Virginia, \$10,000,000; Washington, \$14,000,000; West Virginia, \$8,000,000; Wisconsin, \$19,500,000; Wyoming, \$3,000,000.

### DIRT HIGHWAYS ARE EASIEST

Unpaved Country Roads Cause Least Wear on Tires, While Slag Is Most Destructive.

The much maligned dirt road finds a champion in a Denver tire manufacturer, who asserts that exhaustive tests show that the unpaved country road causes the least tire wear. But the road must be in good condition, with no ruts to wear against the side walls of the tire. When properly dragged, the unpaved country road is found to generate less heat in the tire than any other type of road.

Slag roads were found to be most destructive to tires, the sharp points soon pitting the tread with its holes. With the test car's wheels a fraction of an inch out of alignment, the tires looked as if their tread had been sandpapered after only a few hours' travel. Asphalt pavement was found to develop much heat, but little external wear. Macadam roads in good condition were found to be better than slag.

### ADVANTAGES OF GOOD ROADS

Means Release to Farmer and City Man From Bondage of Rail-road Discomforts.

To both city man and farmer the good road means release from bondage—bondage to electric, steam car schedules and discomforts—bondage to distance—bondage to time. Counties and states where good roads have become a steady part of a progressive program of legislation have seen values shoot up in most surprising fashion, and this again has brought home the fact that good roads pay for themselves.

### DEMAND FOR GOOD HIGHWAYS

Nothing So Vital to Transportation System and Future of Automotive Power.

"Let's Preach It, Teach It and Demand Good Roads," says Orville D. Coppock, sales manager of the Commerce Motor Car company, Detroit. "Nothing is so vital to the transportation system of our country, and the future of the automotive industry as good roads."

### Bar Tractor From Road.

Because of its tendency to damage roads, the tractor is barred from many state, county and private highways. In spite of being thus in disrepute, however, it is considered indispensable in many communities for building, repairing and maintaining roads. Many a fine dirt road owes its smoothness and state of good repair to frequent use of the drag or grader, pulled by a husky tractor.

Keep out all weeds before they start. It is easier and cheaper.

## Two Princes Claim Chateau

Historic Building and Grounds Seized by France During War Is Demanded.

### ROYAL HOME TWO CENTURIES

Louis XV Gave It to Marshal Saxe and Napoleon Presented It to Marshal Berthier—Became Possession of Dukes of Parma.

Paris.—Efforts by two princes of the house of Bourbon-Parma to recover possession of the celebrated Chateau Chambord, which was sequestered by the French government during the war, is one of the most interesting afterthoughts of the great conflict. The chateau is more than 400 years old and is one of the most striking

and interesting of all the famous feudal establishments of ancient France.

It was once one of the most magnificent of these great estates and lies in the valley of the Loire close to the town of Blois and has about 15,000 acres, part of which is inclosed by walls extending for 20 miles. The building is about 200 feet square with famous circular towers at the corners and a double spiral staircase leading to the double lantern, which dominates the center tower.

It was built about 1526 and for two centuries was a royal residence. Louis XV gave it to Marshal Saxe and Napoleon presented it to Marshal Berthier. Eventually it fell into the possession of the duke of Parma.

At the beginning of the war it was owned by Prince Elias of Bourbon-Parma and was sequestered because he was serving in the Austrian army as an attaché of the Austrian general staff. Prince Elias is a brother of Zita, wife of the former Emperor Charles of Austria, who lately attempted to regain his throne as king of Hungary.

After the war Prince Elias attempted to recover possession of the estate, but the French courts have just disallowed his claim. This, however, does not settle the question of its ownership, for Prince Sixtus, also of Bourbon-Parma, brother of Prince Elias, has put in a claim to the ownership of the chateau.

### Princes' Services Refused.

Prince Sixtus does not suffer the disability of Prince Elias, as Sixtus and his brother, Xavier, both offered their services to the French government in the war and being refused on the ground that descendants of the old royal houses could not be permitted to fight for France, they both enlisted in the Belgian army, where they served as stretcherbearers. Their bravery in this service was afterward recognized in a French citation.

Americans will identify Prince Sixtus as the man who received, while the war was still in progress, the famous letter from Emperor Charles of Austria in which he stated that he sympathized with France's aspirations to recover Alsace-Lorraine and that in his opinion Belgium should be restored by Germany.

Prince Sixtus turned the letter over to President Poincaré and its publication by Premier Clemenceau created consternation in Germany. Emperor Charles denied its authenticity.

## Queen Mary a Doctor of Law



Queen Mary of England was honored recently by Oxford university when the degree of Doctor of Common Law was conferred upon her. It was the first time that this degree had been conferred upon a woman. In the photograph Queen Mary, in robes, is shown walking through the streets of Oxford with Earl Curzon, the chancellor of Oxford.

## EARTH RUBE OF SOLAR SYSTEM

360 Quintillion Miles Off the Sky Broadway.

Scientist Discovers That the Universe Is One Thousand Times Greater Than It Has Been Thought.

Cambridge, Mass.—Dr. Harlow Shapley, the astronomer who recently came to Harvard from Mount Wilson observatory in California, announces that he has made discoveries that reveal the universe to be a thousand times greater than scientists have thought.

By so doing he has relegated the earth to a plane one thousand times less important than it has heretofore occupied. And instead of being in the "center of things," as has been understood heretofore, he estimates it to be something like 360,000,000,000,000,000 miles from the center of the universe.

## \$14,000 FOR "POT OF GOLD"

"Spirits" Wouldn't Work, However, So Aged St. Louis Swindler Goes to Prison.

Chester, Ill.—Joseph Pellinski, sixty-one years old, of St. Louis, started an indeterminate sentence of from one to ten years in the southern Illinois penitentiary here, following his conviction at Alton of swindling Weert Bauer, a retired farmer, out of \$14,000 under the pretense he was aiding Bauer to locate a "pot of gold" valued at \$70,000 buried on Bauer's farm.

The gold, it was claimed, was to be located through spiritualistic seances conducted by the defendant's wife. It was supposed to have been hidden by a relative of Bauer.

### Sale of War Materials Brings Billion.

Washington.—Domestic sales of surplus war materials since the armistice have amounted to approximately a billion dollars, Assistant Secretary Walnwright of the War department informed the senate military committee.

## Caterpillar Launches Lifeboat



A specially constructed caterpillar for launching lifeboats was successfully tested recently at Hunstanton, England. The tractor draws the lifeboat, on a specially built carriage, to the beach and then, reversing, pushes it into the sea beyond the breakers, eliminating the chance of the boat overturning.

## Cut Cardboard.

is used for so many purposes it is well to know how to cut the edges. Never use scissors for the purpose, because that jagged edges. First lay a ruler on the cardboard edge upward. As the ruler is drawn across the board when placed. Now procure a very sharp knife, hold the ruler firmly,

### Flowers Not for Sick Room.

All flowers grown from bulbs are dangerous in rooms where there is illness. Although bunches of flowers are invariably taken to the sick, such

### We Agree.

The teacher of the fourth grade decided to teach her children how to use some collective nouns correctly though none of them knew collective nouns from turnip tops. Accordingly when John T. said a "pair of horses" she smilingly substituted "a team of horses."

## and draw the knife along the brass edge. Do not attempt to cut through the cardboard the first time, but merely score it deeply. Now remove the ruler and cut through the incision. The result will be as clean a cut edge as a picture dealer can make on his wats.

blooms as hyacinths, lilies-of-the-valley, tuberose, and even daffodils and narcissus, should be carefully avoided. The perfume is said to be as dangerous to a person in a critical state of health as a dose of morphine would be, without possessing the benefits which that drug sometimes confers.

### Jud Tunkins.

Jud Tunkins says your so-called "good loser" is usually no more than a man who has sense enough to keep his mouth shut.

### Half Dollar in Boys Throat.

Louisville.—Dr. S. Shelton Watkins recently removed a half-dollar which, since January, had been lodged in the throat of Ray Johnson, 12-year-old son of a Brownsville, Ky., stock broker. Dr. Watkins administered an anesthetic, after which he abstracted the coin with forceps. The boy was able to leave the hospital several hours later.

### Power in the Arrow's Flight.

The Lisso warriors of the Salwin valley, Yunnan, China, make use of a bow and arrow, and the latter is hurled with such force that it will penetrate a dart-board one inch thick at a distance of 70 yards.

## Bachelors in Angora Save Their "Angoras"

Angora, Asia Minor.—The bill introduced in the nationalist assembly which would compel all men to marry unless prevented by health reasons has been rejected.

### Under the measure bachelors would have been very heavily taxed, while married men would have enjoyed special privileges in taxation and curtailed military service.

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