THE URAL COSSACKS AND THEIR INTERESTING INDUSTRY

Great River Given Up Entirely to the Purposes of Fishing, All Commercial Navigation Being Prohibited.

\$~~~~~~~~~ The Ural Cossacks, who live on the boundary between European Russia and Asia, have been known in Russia for a long time, not only as brave so diers in war time, but also as peaceful fishermen, carrying on the fishing industry on a very large plan and in quite a peculiar manner. The economical importance of the

fisheries for this people is so immense that it influences their whole life, not excepting the military service. The Ural Cossacks have ready for the service every year about three thousand cavalry, and in case of war every adult may be called on to serve as

because the fishing is accomplished by a peculiar kind of hook. When the a peculiar kind of nook. When the ice in the river becomes firm enough to support the weight of the fishing army, which generally takes place in December, an order is given for the army to meet at Uralsk, from which point the fishing is begun. On a fixed day, theywards of preceded and and day, thousands of people, old and young, hasten to the shores. The fishermen are armed with a chisel, and two haft-hooks—the long one, with a haft of seven or more fathoms, is used for catching fish in deep places on the bottom; the short one is des-tined to hold the fish when it is

brought to the surface of the ice.

At the signal two living waves of people rush forward to the middle of the river, and the arduous work be-glins, everyone trying to be the first to make a hole in the ice with a chisel. In a few minutes an entire forest of long hafts grows up over the ice. The fishermen move the haft up and down



FISHING THROUGH THE ICE ON THE URAL RIVER IN WINTER.

soldier. The entire population is about

The Ural River is the only large riv er that is entirely given over to the fishing industry, all sorts of commercial navigation being absolutely for bidden from Uralsk to the Caspian Sea

—330 miles—and more than that in some places, where sturgeon congregate for their winter sojourn, no one is permitted in a boat, to make any noise or build a fire on the shore, etc. By the laws of the community summer fishing is almost entirely pro-hibited, for the purpose of protecting the spawn. The fish are allowed to enter the river from the sea and set-tle there quietly for the winter. Ali possible means are used to secure for the fish an unrestricted passage to the upper parts of the river, but not be Uralsk, where a carrier is structed across the river to keep them

Owing to this arrangement, the low er part of the river forms a large nat ural fish pond, 330 miles in length where the fish are carefully watched by a great many fish wardens until the regular time for fishing, which is fixed by general consent of the com-

As a rule, one part of the river, the lower, is intended to be fished out in the fall, the other, upper, portion in The fall fishing begins about the 17th of September. On a certain day, the "fishing army," as it is called, moves to the fishing places, which are sometimes very far from home. The Cossack carts, generally drawn by camels, contain not only nets and pro visions, but also the boat used in this fishing. The boats are known by the name of boudara, are so light that two



THE STUGEON CATCH ON THE URAL

of them may be carried in one cart are taken from the carts. and early in the appointed morning placed at the edge of water, ight along the river. No less than 3000 boats, each containing two men, meet on the shores. To main-tain discipline, a chief, or "fishing ataman," is appointed, and several representatives of the fishermen are elected to assist the chief. The ataman gives a signal to commence fishing by a cannon shot, and then the crowd rush to the boats, and in less time than one can realize what has happened all the fishermen are in their boats and a peculiar kind of boat racing com-Various kinds of sturgeon thirty to 600 pounds weight, sander, carp, bream and silurus are the principal fish caught. differ, of course, in the size of their meshes, according to the fish for which

The total catch during the fall sein 54,000,000 to 72,000,000 pounds, which includes two hundred and sixteen thousand pounds sturged and about twenty-one thousand six hundred pounds caviare.

Another large army of equal magnitude, consisting of carts, accompanies large number of carts, accompanies the fishing army. These carts are con tracted to carry the catch to the city markets, there being no railroad in this steppe. No less than 10,000 carts are used here.

The fishing in the upper part of the

Ural River is carried on in winter, branches, the idea being that it is the under the ice, and that is the most peculiar of all fisheries. It is called likely to secure the best servants.

and listens intently that he may know this has happened, he hooks the fish by an alert movement, then hauls it immediately up to the surface of the ice, calling in the meantime for help from his fellow-fishermen. They fish

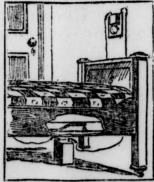


CARRYING THE BOATS TO THE FISHING GROUND BY CAMEL.

here usually in groups of from six to twenty men, for it is not easy work to pull up a huge sturgeon of several hundred pounds weight. In a very short time the surface becomes marked with blood and covered with big fish The most important fish caught in winter are different kinds of sturgeon desired principally for the roe.-Philadelphia Record.

Electric Time Alarm.

When the bell of an ordinary alarm clock begins to ring the sleeper is apt to wake up sufficiently to think it will stop soon, and as he is not compelled to arise and stop ft, the result is often another nap with its consequent de-lays throughout the day. This objec-tion has led to the designing of the continuous ringing alarm, of which several are already in use. The elec-tric alarm, which we show in the accompanying picture, has just been patented by Simon Wolf, of Essen, Germany, and has at least one novelty to recommend it. It is directly con-nected to the bed, and it is impossible for the sleeper to stop it until he gets up to stay. Underneath the bed is a series of contact points, one of which is shown in the picture, the weight of the person forcing them together. A clock is used in connection with the apparatus, and as soon as the hour of rising is indicated the remaining open ing or break in the wire is closed, the current passing through the contact points underneath the bed and causing



RINGS UNTIL SLEEPER LEAVES THE BED

the bell to ring continuously until the sleeper by leaving the bed, breaks circuit. Should be lie down again the circuit is again completed and the bell rings until the second rising.

A School For Housekeepers

Much has been done in the way of training servants in England, and now the attempt is to be made to train the mistress as well. A large house has been taken at Brighton, where the art of housewifery is to be taught in all its

A Uevastating Louse &

The appearance of the pea aphis, which last year attacked the peas in Maryland, Delaware, New Jersey, New York, Pennsylvania, Virginia, North Carolina and Connecticut, has called attention to the fact that pea culture is an important industry in the United States. The attack which the pea louse made on the growing crop last season caused a loss of about \$3,000.

The louse has been known about one year, but it has established its name as an economic pest. It appears suddenly and in large numbers and soon kills the plants. The winged insect is about one-eight of an inch long, with a wing expanse of nearly one-quarter of an inch. It is pale gree with darker legs and long honey tubes. The female produces living young, which reach maturity in from ten to fifteen days, and in less time when the weather is hot.

An observer of the pea louse writes this as to its peculiarities:

"A young one born on March 4 reached maturity—the winged form on March 16, and was producing liv-ing young on the 19th. From March 19 to April 17 she became the mother of 111 young, and died on the latter date. Her first young—wingless form—born on March 19 produced on March 31, or eleven days from date of birth. From March 31 to April 18 she gave birth to 120 young and died."

When they are permitted unchecked the pest sweeps large area in a short time, and large fields have been killed in a

The natural enemies of the pea lous are lady beetles and their larvae, the lace winged fly and its larvae, syrphus fly and its young, and soldier beetles. These have been abundant in many parts of the country this year where peas had been planted, and in some parts of the country these natural enemies have saved twenty-five percent. of the crop. Many were also destroyed by the fungous disease, and in places where the lice have appeared the growers wish for damp, warm and sultry weather, under which conditions the fungous disease usually develops

It will not do, however, a pea grower said, to depend too much on these natural destroyers. He recommends the use of the brush and cultivator where the peas are in rows. A destroy ing spray composed of tobacco, whale oil soap and water was used with good effect until it became known that the spray destroyed also a natural enemy of the pea louse. This enemy is the syrphus worm. This insect's power as an exterminator of pea lice is demonstrated in the report of an observer to the Maryland Agricultura! College. He says:

"The syrphus worms feed on the lice at a rapid rate. Yesterday we found a syrphus worm nearly full grown and

cupy as much room when stored in large quantities as the inflated or corl circular floats, and it also affords som neasure of protection from the water.

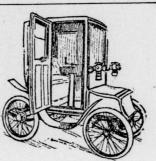


THE NEW LIFEBOAT IN USE.

The opening in the top of the boat may be adjusted closely around the waist if the water is rough, thus practically shutting out the water from the interior, and as the keel is weighted. the boat will maintain an upright posi-tion. A seat is provided for the passenger and the boat may be propelled by a paddle, which can be placed inside the canvas cover when the boat is folded.—New York Mail and Ex-

A PHYSICIAN'S AUTO, Motor Vehicle Which is a Model of Compactness.

Several motor vehicles for the usof physicians have been placed on the market by American makers, but none of them are more compact than that shown in the accompanying illustra-tion reproduced from the Horseless

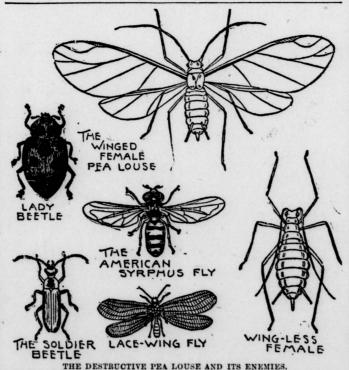


LATEST AMERICAN DESIGN OF A GASO-LINE COUPE FOR PHYSICIAN'S USE.

In this auto-coupe, as it might be called, the doctor is completely protected from storms. It is a model of coziness within, soft cushions, fina upholstery and highly finished wood-work combining to give it a luxurlousness which even the majority of horse drawn physicians' carriages do possess. In front a box of neat design affords a large storage space, while under the seat is additional room for

the same purpose.

Although the vehicle here shown is fitted with a three and a half horsepower gasoline motor, the makers of-



placed a louse within its reach, when it was quickly devoured. We then placed a mother and seven newly born lice clustered about her in a small vial, enclosed the syrphus worm and A Roman Mileston found that by actual time the worm destroyed the seven lice in exactly

seven minutes and the mother a little of Jerusalem, recently unearthed a The writer warn pea growers not to destroy the syrphus, and in order to avoid all possibility of doing so to use no spray against the pea destroyer. When the lice are brushed off and the ground is hot the little creatures are

A Life-Saving Boat.

roasted to death by the sun.

A collapsible lifeboat has just been invented by a native of Switzerland. The appliance has two frames, one of which is inserted in the other and pivotally mounted on bolts to turn at right angles with the outer frame. The frames are inserted in a canvas bag in such a manner that the operation of turning the frame across each other distends the canvas and forms a safe boat for the use of a shipwrecked pas-

fer the option of a five horse-power engine, which will allow of increased passenger-carrying capacity.

Yellaheen workmen, in digging for a new road near Shapat, two miles east



MILESTONE FOUND NEAR JERUSALEM.

Roman milestone. A section of it is shown in the cut. This milliarium was probably the second one from Jerusa-lem. They were placed at intervals of 1000 Roman paces, about equivalent

senger or sailor.

One great advantage of this form peach, the marrying clergyman may of life-preserver is that it does not oc. be justified in looking for a pair.

DR. TALMAGES SERMON

SUNDAY'S DISCOURSE BY THE NOTED DIVINE.

Subject: Entering the Gate-Exultant Adon Awaits Those Who Have Lived For Others, While the Bigot and Pen-

Subject: Entering the Gate—Exultant Admission Awaits Those Who Have Lived For Others, While the Bigot and Penurious Will Barely Squeeze Through.

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WASHINGTON, D. C.—In a very novel way Dr. Talmage in his discourse describes what may be expected in the next world by those who here bend all their energies in the right direction; text. Il Peter i, 11, "For so an entrance shall be ministered unto you abundantly."

Different styles of welcome at the gate of heaven are here suggested. We all hope to enter that supernal capital through the grace that is ready to save even the chief of sinners, but not now. No man healthy of body and mind wants to go now. The man who hurls himself out of this life is either an agnostic or is demented. Or finds life insufferable, and does not care where he lands. This is the best world we ever got into, and we want to stay here as long as God will let us stay. But when the last page of the volume of our earthly life is creded we want enrollment in heavenly citizenship. We want to get in easilv. We do not want to be challenged at the gate and asked to show our passports. We do not want to be kept in the portico of the temple until consultation is made as to where we came from and who we are and whether it is safe to admit us, lest we be a discord in the eternal harmonies or lower the spirit of heavenly worship. When the Apostle Peter in the text addresses the people. "For so an entrance shall be administered unto you abundantly." be implies that some will find admission into heaven easy, ranturous and acclamatory, while others will have to squeeze through the gate of heavenly worship. When the Apostle Peter in the text addresses the people. "Come!" or "Go!" The Bible sneaks of such persons as "scarrely saved," and in another place as "scarrely saved," and in another place as scarped "by the skin of the teeth."

Carrying out the suggestion of my text. I propose to show you what classes of Christian will get into heaven with a

such persons as scarcely saved, and in another place as "saved as by fire," and in another place as "saved as by fire," and in the teeth."

Carrying out the suggestion of my text. I propose to show you what classes of Christians will cet into heaven with a hard push and those who will bound in amid salutations infinite. In the first class I put that man who gets into the kingdom of God at the close of a life all given to worldliness and sin. Years ago he made the resolution that he would serve himself and serve the world until body, mind and soul were exhausted, and then, just before going out of this life, would seek God and prepare to enter heaven. He carries out his resolution. He genuinely repents the last day or the last hour or the last minute of his life. He takes the last sext in the last car of the last train bound heavenward. His released and immortal spirit ascends. Not one wing bears down toward him with a welcome. No sign of gladness at his arrival. None there obligated to him for kindness done or alms distributed or spiritual help administered. He will find some place to stay, but I do not envy that man his heaven. He got in, but it was not an abundant entrance.

Sometimes in our puloits we give a wrong turn to the story of the dwing thief to whom Christ said: "This day shalt thou be with Me in paradise," We ought to admire the mercy of the Christ that nardoned him in the last hour, but do not let us admire the dying thief. When he was arrested I think his poekets were full of stolen coin and the coat he had on his back was not his own. He stole right on until he was arrested for his crimes. He repented, and through great mercy arose to paradise, but he was no example to follow. What a gigantic meanness to devote the wondrous ecuipment of brain and acrve and muscle and bone with which we are endowned, these miracles of sight and hearing and speech, to purposes unworthy or profane and then, through hasty reentance at the last enter heaven. Cheating God all one's lifetime and then taking advantage o

some men would be ashamed to enter heaven.

Again, the bigot will not have what my text calls an abundant entrance. He has his bedwarfed opinion as to what all must believe and do in order to gain celestial residence. He has his creed in one pocket and his catechism in another pocket, and it may be a good creed and a good catechism, but he uses them as sharp swords against those who will not accept his theories. You must be baptized in his way or come to him through apostolic succession or be foreordained of eternity or you are in an awful way. He shrivels up and shri

metricular in the series and honor and glory and powers."

Denominations of Christians on earth were necessary in order to better work and to suit preferences, as an army must be divided into regiments, yet one army; is a neighborhood must be divided into families, though one neighborhood. But there is no need for such divisions in heaven, and therefore all belong to one decomination of sainthood. What will be the bigot's amazement when he sees seated side by side on the banks of the river of life Calvin and Arminins, Archibishop Cranmer and some dissenting preacher of the gospel who never graduated, one who on earth was a robed and surpliced ecclesiastic, and a backwoods minister who in the log cabin meeting house preached in a linen duster? Among the great surprises of heaven for the bigot will be the celestial friendliness of those who on earth opposed each other in wrathiest polemies. He will get through the gate, for he has a spark of divine grace in his heart, but there will not be an inche of room to spare on either side of him. It will not take long for heaven to educate him into a glorious big heartedness.

Again, the penurious Christian will not have an abundant entrance. Perhaps he was not converted until all his habits of tight fistedness were fixed beyond recovery. The people who are generous were taught to be generous in childhood. You can tell from the way that boy divides the apple what his characteristics for generatively of the period of the converted until all his habits of tight fistedness were fixed beyond recovery. The people who are generous were taught to be generous in childhood. You can tell from the way that boy divides the apple what his characteristics for general tell from the way that boy divides the apple what his characteristics for general tell from the way that boy divides the apple what his characteristics for general tell from the way that boy divides the apple what his characteristics for general tell from the way that boy divides the apple what his characteristics for gene Denominations of Christians on earth

the fifties or sixties of his life, during e revival of religion, he became a Christian revival of religion, he became a Christian He is very much changed in most respects but his all absorbing acquisitiveness stiff influences him. To extract from him a gift for an orphanage or a church or a poon woman who has just been burnt out is ar achievement.

for an orphanage of a church or a poon woman who has just been burnt out is at achievement.

But the day is coming for that penuriom Christian's departure from the world. He has an awful struggle in giving up his Government securities. The attorney whe drew his last will and testament saw how hard it was for him to leave his farm on his storehouse or investments, especially those that in the markets are called gilt edged. Those that yield only three per cent. he easily resigns to the care of his executors, but those that yield eight on nine or ten per cent., how can he give them up while the market is still rising! Bolstered up in bed, knowing he has got to sign it, he reads the document over any over again, and then, with a manner that seems to say, "Well, if I must I must," he signs his name to that surrender of his last farthing of earthly possessions. He enters heaven, but he has not an abundant entrance.

enters heaven, but he has not an abundant entrance.

But that brings me to the other thought of my text, that there are those who will when they leave this life bound into heaven amid salutations infinite. "For an entrance shall be administered unto you abundantly." Such exaltant admission will await those who enter heaven after on earth living a life for others and without reference to conspicuity.

I asked the manager of an insane asylum in Kentucky, "From what class of persons do you get most of your patients?" and he said, "From farmers' wives." I asked the same question of the manager of an insane asylum in Pennsylvania and the same question of the manager of an insane asylum in Massachusetts and got the same question of the manager of an insane asylum in Massachusetts and got the same reply. "We have on our rolls for treatment more farmers' wives than persons coming from any other class." That answer will be a surprise to some. It was no surprise to me.

Well, this man of consecrated affluence

It was no surprise to me.

Well, this man of consecrated affluence is about to go out of this world. He feels in brain and nerve the strain of the early struggles by which he won his fortune, and at sixty or seventy years collapses under the exhaustions of the twenties and thirties of his lifetime. When the morning papers announce that he is gone there is excitement not only on the avenues where the mansions stand, but all through the hospitals and asylums and the homes of those who will henceforth have no helper. But the excitement of sadness on earth is a very tame affair compared with the excitement of gladness in heaven. The guardian angel of that good man's life swept by his dying pillow the night be fore and on swift wing upward announced that in a few hours he would arrive, and there is a mighty stir in heaven. "He comes!" cries seraph to seraph. The King's heralds are at the gates to say. "Come, ye blessed," and souls who were saved through the churches that good man supported and hundreds who went up after being by him helped in their earthly struggle will come down off their thrones and out of their palaces and through the streets to hail him into the land which they reached some time before through his Christian philanthropy. Now, that is what I call an abundant entrance. You see, it is not necessary to be a failure on earth in order to be a success in heaven.

But I promise that all those who have lived for others and been truly Christian, whether on a large scale or a small scale, will have illustrious introduction into the impearled gateway. Here and there in some large family you see an attractive daughter who declines marriage that she may take care of father and mother in old days. This is not an abstraction. I have known such. You have probably known such. There are in this world womanly souls as big as that. They cheerfully endure the whimsicallities and querylucture the whimsicallities and querylucture of this self sacrificing daughter the old folks go home. Now the daughter is free from mar