

ஓர் இழிஸ்தான்,

PEARL FISHERIES OF CEYLON.

In the year 1902 Prof. W. A. Herdman, B. Sc., F. R. S., made a visit to Ceylon at the request of Mr. Chamberlain to investigate the condition of the pearl fishery banks.

In the July number of the Popular Science Monthly, there is an abstract of a discourse on this subject before the Royal Institution of Great Britain. [He made a preliminary report to the Governor of Ceylon in July 1902.] Some of the points made in this discourse are:

1. The Fisheries are of very great antiquity. They are referred to by various classical authors. Cleopatra is said to have obtained pearls from Aripu on the Gulf of Manaar.

2. The fisheries have been very uncertain. During the Dutch times there was one period of 28 years without a fishery and other long intervals.

3. By an investigation of the Periya bank or pair he was convinced that millions of young oysters are overwhelmed and destroyed by "natural causes, due mainly to the configuration of the ground and its exposure to the Southwest Monsoon." There is no basis for the belief that the Periya Pair is a mother pair from which the young oysters migrate inwards to supply inshore pairs.

By investigation it was found that there were "not less than a hundred thousand millions" of young oysters on this pair in March, that had been buried in sand or carried down the declivity into the deep water outside, before November. This shows that oysters should be removed from this bank to one less exposed.

4. There are other minor causes however working with these "Star-fishes, boring sponges that destroy the shell, boring molluscs which suck out the animal, internal protozoan and vermean parasites and carnivorous fishes" are its enemies.

Some of these however are an aid in pearl production.

5. There are several causes that lead to the production of pearls. Boring sponges and burrowing worms by the irritation lead to the production of pearls. "Minute grains of sand and other foreign bodies gaining access to the body inside the shell, which are popularly supposed to form the nuclei of pearls, only do so, in our experience, under exceptional circumstances." This happens only when the shell is injured.

The majority of pearls contain remains of parasites. "So that the stimulation which causes eventually the formation of an 'orient' pearl is, as has been suggested by various writers in the past, due to infection by a minute lowly worm, which becomes encased and dies." It is suggested that oysters might be infected by these worms and more pearls produced. The parasite worms are of various kinds and widely distributed about the coast of Ceylon.

6. Prof. Herdman left his assistant Mr. Howell in Ceylon to carry on investigations and it is hoped that much more information will be obtained in regard to the life of the oysters and production of pearls. A small laboratory has been built at Galle where conditions are most favourable for study. He hopes this laboratory will be put on a permanent basis.

Foreign News

Russia seems to be stirring up trouble in the far East. Just now interest centers in Manchuria. The great trans-continental railway has its terminus in Vladivostok, and it must be conceded that Russia has some right to insist that her influence be paramount in Manchuria. But this does not mean that she has a right to take formal possession of the whole country and annex it to her empire against the protests of China and Japan. Apparently this is what she wants and is trying to bring about, though it is denied at St. Petersburg. England and the United States are indignant because Russia is closing the open door for trade in spite of the pledges given by China that the country should be thrown open to the trade of all nations. Japan is gaining influence in China, and seems fully alive to the fact that she may be forced into war before Russian aggression can be stopped. This in brief is the situation at present.

In the meantime the Kishineff massacres have aroused feeling in England and America against the Czar. The *London Times* correspondent

in St. Petersburg has been expelled from the country because of his outspoken utterances at the atrocities committed against the Jews. Protests have been forwarded to the Czar, but apparently with little effect. It is reported that the troubles in his Empire are wearing upon him and that he realizes the seriousness of the situation. It is not likely that there will be war, however, but a peaceful settlement will ere long be brought about.

Turkey in the near East has its hands full. In the last issue reference was made to the feeling of unrest in Bulgaria, and now comes news that four battalions of Turkish soldiers, supported by artillery defeated in pitched battle 1,700 Bulgarians on the 6th inst. Turkey declares that the movement in Macedonia has become general and is sending forward troops to suppress the rebellion. An insurrection has broken out among the Albanians also. A big fight has taken place at Monastir and the rebellion is spreading. The Powers are watching the situation very closely and grave and wide-reaching consequences may result.

South Africa is passing through a transition state and has its troublesome questions which threaten to make discord in its government. General Botha has come out in a tirade against the government, though much of what he says amounts to very little. Among the complaints which seem to have foundation in actual fact are the following:—The placing of a War Debt on the Colony which has aroused the antagonism of the burgher population; the new educational system so distasteful to the Boers; the importation of cheap Chinese labor; and the increasing power of the mine owners, proving so offensive to many. Such difficulties are to be expected until things become finally adjusted and the government wins its way into the hearts of the people. Ere long we shall have a powerful and prosperous country in South Africa.

Mr. Chamberlain's proposal for preferential tariffs is meeting with strong opposition in England and there is very little likelihood of his project being carried through. Sir Michael Hicks Beach is the leader of a new organization among the Unionists who have arrayed themselves against Mr. Chamberlain and his policy. The *Spectator* says of this organization that "if it succeeds in its work, it will have saved the Empire from a policy which would have shaken its foundations the principle upon which the Imperial fabric rests,—the principle of non-interference with the fiscal independence of the component parts of the Empire."

On the other hand the *London Times* publishes a manifesto from some prominent Liberals in support of Mr. Chamberlain's policy. These gentlemen argue that it is foolish to revive the old arguments against Protection when the times have changed and the issues are no longer the same. If we wish to keep the Empire together, we must not legislate for England alone, but for all its colonies as well. Canada and Australia with a joint area of nearly seven million square miles and a population of about 10,000,000 have surely a right to be heard. Mr. Balfour is supporting Mr. Chamberlain and the fight promises to be an interesting one.

A terrible disaster has taken place in Paris. A train on the underground railway took fire and in spite of all that could be done 84 persons lost their lives. Most of these died of suffocation while trying to get away from the place to one of the stations.

FOR THE YOUNG PEOPLE

"Go in Peace."

The Rev. Mark Guy Pearse tells us in one of his charming books that on a very hot summer day he had been diving along a quiet country road when he overtook a poor woman carrying a big, heavily-filled basket. With characteristic kindness he stopped his horse and invited her to take a seat.

Of course she gratefully accepted it. As they proceeded, however, Mr. Pearse observed that she still kept holding the basket upon her arm.

"Had you not better put down your basket in the bottom of the carriage?" he suggested; "you will be much more comfortable without it."

"So I will!" she exclaimed; "thank you, sir! I never thought of that!"

"Often do the same," remarked Mr. Pearse. His puzzled fellow-traveller looked inquiringly for explanation.

"Yes, my good woman," he continued; "the Lord Jesus has taken me up into His chariot, and I rejoice to ride in it, but very often I keep carrying a big burden when I ought to have put it down; for if the Lord is willing to carry me, He is willing, likewise, to carry all my cares!"

How true! What a number of excellent people, whom we cannot possibly doubt are Christians, dishonour God by their constant hurry and worry! If the tender, loving Saviour has assured each of us: "The sins are forgiven,"—thy faith hath made thee whole!—and He has, if we have really come to him—shall we forget His immediately-added three gracious words, "Go in peace?"

Now remember, this "peace" is not a thing of file and starts; it is a settled, permanent possession.

Let us not forget our Saviour's parting legacy to His disciples of all nations, and throughout all ages, the priceless legacy of PEACE—"Peace I leave with you, My peace I give unto you; not as the world giveth, give I unto you. Let not your heart be troubled, neither let it be afraid."

A Crook's Self-Sacrifice.

A dramatic story of heroism, is told by the *Daily Times* of California. It says that two men were caught recently in a crafty plot to defraud an old man of his property. It is realized when they are arrested, that the evidence against them was conclusive. The police did not know how strong a case they had, but the prisoners were aware that it would come out before the trial. Bail was fixed at two thousand dollars each. One of the prisoners was a young man, while the other was far advanced in life. The younger man, had twelve hundred dollars in all at command. The elder, about a thousand. "There is not enough for us both," said the younger man. "But it is no use for us both to go to prison for three years. I will let you have a thousand dollars, and that will enable you to put up the bail for yourself. Then you can skip, and I will stay and face the music." The elder man protested against deserting his companion, but the other insisted. "You would die before your sentence was out," he said, "while I could bear it." Finally, it was so settled. The elder man left for parts unknown, while the younger man, having given up his money, has gone to prison for three years. It is strange that a man capable of such self-sacrifice should be a criminal. What a pity that a nature so fine should be spoiled by yielding to evil propensities! If he would only take advice of the Apostle, he might be saved.

If a man purge himself from these, he shall be a vessel unto honour, prepared unto every good work" II Timothy 2:21.

Virginia Heroines.

A beautiful story of devotion to humanity comes from the United States. A Northerner settled in the South, some time ago. Recently he was attacked by smallpox and died. His wife, who had tenderly nursed him through his illness, was stricken and then her child, and finally a woman who had been helping her in their household affairs. The three sufferers lay there in their misery, no one daring to go near them. Dr. Fisher, who had charge of the case, sought vainly for some one to nurse them. He mentioned his quest at home and there was a prompt response. His two daughters volunteered to undertake the task. He told them, as was his duty, of the danger they incurred, but they did not shrink from it. They went to the house from which all others fled in terror, and attended to the patients. In spite of their care and attention, the child died, but the other two patients are recovering. The young ladies did not limit their good offices to the sick, but when one of the little body and even helped their father to dig a grave for it, and one of them read the burial service when it was committed to the grave. Such noble conduct deserves a special honor, and we may be sure that even if it does not win it from men, it does not need the approval of heaven. "Pure religion and undefiled is to care for the Fatherless and to keep himself unspotted from the world." James 1:27.

A Pest and its Antidote.

The Department of Agriculture at Washington, D. C., is engaged in an interesting experiment. It is hatching a few bugs which were brought from Northern China by Mr. Marlatt, an American entomologist. During a recent visit to that region, he noticed on the trees of a plantation, the gray scurf or wax secretion known in America as the "San Jose scale." Mr. Marlatt recognized it only too readily, for it has involved the loss of fruit trees worth tens of thousands of rupees. The owner of the plantation told his visitor that he could easily get rid of the pest by means of the hedgehog bugs, which like to live on the wax secretion. Mr. Marlatt soon had an opportunity of witnessing the proof of the truth. On his next visit the trees were in normal condition. Knowing the havoc wrought in America by the pest, he secured a large number. All of them, except twelve, died on the voyage, but the dozen survivors were at once set to work, and proved their ability to clear a tree of its destroyers, in a short time. Tipping at an enormous rate. It is believed that it is to be sent to any district afflicted by the pest, to a farmer whose trees are being destroyed by the pest. When he can obtain a remedy how quickly he will apply for it! Unhappily there is not the same gratitude on the part of men, whose condition is far worse—who are sin, yet who do not seek the remedy which God has freely provided.

Is there no balm in Gilead; is there no physician there who recovered?" Jer. 8: 22.

Printed at the American Ceylon Mission Press, Telipallai.
Published by the American Ceylon Mission & T. S. Cooke.