DARKEST AFRICA'S DESPAIRING CRY

Marked by a Trail of Blood is the Devastating Course of the Arab Slave Hunter.

Only by Force of Arms Can the Brutal Traffic be Suppressed and Civilization Made Possible—A Day of Reckoning Coming.

The slave trade, with all the iniquitous conditions attending it, is all the time rapidly increasing in Central Africa. The Arab slave hunter after gaining wealth does not retire. On the contrary, with the profit of each new venture he buys more guns and ammunition and hires fresh bands of pilaging followers, so that he may enlarge the sphere of his murderous exploits.

Veritable armies of Zanzibaris and Mangemas, officered by Arabs, are constantly engaged in the capture of the natives and the robbery of their ivory.

The villagers of the interior, dreading always a visit from some horde of raiders, hide away their elephant tusks in the jungles and swamps.

The Arabs make no pretense to legitimate commerce; with their superior weapons and overwhelming numbers they can, without difficulty, overcome the poorly armed natives. Actually the slave traffic is subservient to the acquisition of ivory for the Arabs capture the natives and then ransom them for ivory.

The slavers have several strongholds in Central Africa, the principal of them being Tabora, Karema, Kasongo, Nyangwe, Ujiji and Stanley Falls. Large hordes of hired robbers branch out in all directions from these depots and swarm over the whole land. Their plan of action is to stealthily surround a village by night: then at early dawn a few muskets are fired to intimidate the villagers. Bewildered at the rude awakening, the poor creatures rush out of their huts and fall an easy prey to the inhuman villains who leap into the village from all sides. All those who resist are shot down or stabbed, and the remainder, old and young, are taken prisoners and are herded into a stockaded pen and there guarded night and day.

CAPTIVES EXCHANGED FOR IVORY.

The Arabs then open up negotiations with the surrounding villages and exchange their captives for ivory. One big tusk weighing sixty-five pounds will grant the release of one slave. The Arabs remain in such a camp till the district is drained of its ivory. Then the slaves who have been purchased are loaded down with ivory and the merciless pillagers move along to a new hunting ground.

The chart of Central Africa is constantly changing. To-day some traveler maps down a flourishing settlement as yet untouched by prowling slavers. The villagers are friendly and industrious, and well kept plantations of grain and fruit flank the long rows of neatly built huts. A few weeks hence the woods around it will echo back the ring of musket shots and the dying groans of those who dared to defend their homes, and naught will remain of that happy settlement but charred embers and a few decaying bodies, silently explaining in ghastly eloquence the reason of the change.

Many of the tribes who were living near the rivers no longer dwell on shore; they have scooped our monster canoes which are roofed with matting. The natives occupy these all the year through, and by keeping a careful lookout for the Arab's advance they can avoid him by flight down stream.

The cunning Arabs purposely keep the native tribes at enmity among themselves by employing some as allies against a neighboring settlement. In the cannibal regions the payment for such service is "meat," or, to be more explicit, the dead bodies of those cruelly slain in the raids. These Arabs encourage the most brutal and barbarous customs among the interior tribes. Ceremonies involving human sacrifice and cannibal orgies create a demand for slaves which the Arab will supply when the payment is ivory.

ORGANIZED ROBBERS AND MURDERERS.

The Arab slavers are not merely a few brigand tribes scattered over the land, but a powerful, well-organized system occupying the heart of Africa. From the numerous slave depots large bands of hired robbers are constantly going and coming—starting out with their muskets and a few loads of ammunition and returning with slaves and ivory obtained by theft and murder.

The ivory eventually reaches Zanzibar, on the east coast. When a goodly pile has been "collected" at one of the strongholds a caravan of slave gangs carries it to the Indian Ocean. Every tusk, already foully purchased by innocent lives, demands still more sacrifice before the delicate substance, daintily carved, graces some fair one's boudoir, where amid its refined surroundings its bloody history is buried.

It has been frequently said by travelers who have followed the trade of the slaver that so littered is the way with grinning skull and whitened skeleton that should you lose your bearings these grim relics would guide you to the coast.

At Stanley Falls in 1889 Tippu Tip had 70,000 pounds of ivory which had been "collected" by his numerous bands in about ten months. To carry this to the coast 1500 men would be required. The Arabs themselves admit that two-thirds who start with such a caravan never reach their destination. Weakened already by hunger and ill treatment, many succumb to the hardships of the two thousand mile journey; men and women stagger along till they fall from sheer exhaustion. Many of the women have babies beside their load of ivory, and if they show signs of lagging behind the child is snatched from them and left to perish on the wayside so that the precious tusk may still be borne along. Often a slave, showing signs of breaking down, is killed by a savage blow on the neck with a club. His body is then cut away from the slave fork, a new man takes his load, and the caravan continues its journey.

It is a wonder that any of these carriers reach their destination. Given enough food only to keep life flickering in their emaciated bodies, covered with festering sores from the chafing fork and chain, goaded by the cruel lash from morning till night, they are driven along the trail suffering all the indignities and persecutions which the devilish minds of their victim masters can invent and carry out.

All explorers who have penetrated Central Africa have found everywhere the same pitiful conditions.

READY TO FIGHT.

The occupation of Central Africa by the European Powers must inevitably hasten the solution of the giant problem, "How to suppress slavery." The Germans, British, French, Congo Free State and Portuguese have portioned out among themselves the whole of equatorial Africa. Previous to this occupation it was the actual duty of no government to interfere in Central African politics; there was merely the utter helplessness of the poor down-trodden creatures to appeal to the philanthropic spirit of the civilized world.

But now that the European nations have planted their flags throughout the land they are bound to make them respected by protecting the native tribes from the lawless bands of Arabs who are constantly persecuting them.

The Arab slaver powerfully equipped in Central Africa will contest any interference by the white man; he will not desist from his fiendish occupation till compelled by force. The keys which he holds to a rich source of treasure in Central Africa cannot be wrested from him without a fierce struggle.

The Arab slaver will not tolerate legitimate traffic. When the Belgian expedition composed of Mr. Hodester and party commenced to establish trading posts on the upper waters of the Congo they were treacherously murdered to a man.

When Jacques and Joubert built a garrison on Lake Tanganyika in the interests of the Anti-Slavery Society the Arabs immediately constructed a fort near by and commenced an attack, and grave fears are entertained that the white men have ere this shared the fate of poor Hodester and his friends.

A DAY OF RECKONING COMING.

The suppression of slavery is a giant undertaking, but stern measures for its accomplishment are being carried out with grand deliberation. The Congo Free State is all the time strengthening its frontiers to the west. The English and the Germans are about to put well armed gunboats on the great lakes Tanganyika and Nyassa. The natives will be taught to know the white man's intentions and they will readily enlist in a crusade undertaken for their deliverance. The journeys of Stanley and Livingstone and the other explorers who have revealed to the world the bloodstained history of Africa mark the beginning of a noble work.

Those tiny trails penned on the chart marking the journeys of those brave souls who have heroically faced the dangers of that savage land are being worn to broad roads by whole armies, who are gradually closing in on the Arab plunderers. Only a few years must now elapse before the two cross swords, and with but one possible result. The Arabs, cut off from their coast supplies of ammunition and barred from northern support, will be crushed by the well armed forces of civilization and regiments of resolute natives. If necessary they will be annihilated and their power thus destroyed forever.

Human Beings and Cold Weather.

The Marquis de Nadaillac contributes to *Science* a statement of facts illustrating the exceptional faculties which enable man alone of all the mammals to battle with cold as with extreme heat. There is strong evidence that in the earliest times of which we have any knowledge both in Europe and Asia our species lived when large extents of both continents were covered with ice. Later the Aryan race, whatever may have been its birthplace, reached step by step to the Gangetic Peninsula, only eight degrees rom the equator, and in the north reached to Iceland and Greenland. In his eventful journey across the mountains of Central Asia Prince Henry of Orleans had to support a cold of 40° below zero, with piercing north winds, under which horses and camels died, while man resisted. The northern parts of America have known still more severe cold. Capt. Back reported 70° below at Fort Reliance; and at Fort Rae, in latitude 62½°, Capt. Dawson found 88° below in April, 1882. The Abbe Petitot gives us 40° below as the mean temperature of January at Fort Good Hope and 43½° below for February at Yukon, Alaska. At Yakoutsk the thermometer is as low as 49° below during the winter months, and this was long considered as the coldest town of the world, but it must yield to Verbo ansk a small Siberian town at the mouth of the Lena, where we find 67° below in January. And yet this cold is far from being the most severe suffered in those dreary regions. A Frenchman, Mr. Martin, recently dead, wrote to the Geographical Society of Paris that in 59° north latitude and 132° east longitude, he experienced a cold of minus 63° Centigrade, which corresponds to 81½° below zero of the Fahrenheit scale. Lieut. Greely tells us that during his long stay at Discovery Bay the temperature never exceeded 50° and was at one time as low as 66° below. This difference of temperature supported in a few months' time by the same men, is most remarkable. Hunger, dearth of provisions, incredible hardships, broke down those who had so bravely suffered extreme cold. Probably the greatest cold ever endured by a white man is that recorded by Mr. Gilder, a reporter who accompanied the expedition under command of Lieut. Schwatka, which went in search of Franklin. He speaks of the thermometer as lower than 71° Centigrade, which is 96° below on the Fahrenheit scale.

U. S. Society.

The condition of society in the United States, which takes to its bosom heroes of the John L. Sullivan stamp, is to be enriched by a new star. This is Mr. Charles Mitchell, who has just come off the "treadmill" for a cowardly and unprovoked assault upon a poor old man. The London correspondent of the New York Sun evidently has derived some advantage from his English experience when he announces this event in the following words: "America may prepare to congratulate herself or otherwise over the fact that Charley Mitchell proposes to transfer his allegiance to the stars and stripes. England doesn't appreciate him. There is not sufficient liberty in a country which sends a man of Mitchell's prominence to a common jail for slugging a no-account old man. It is said he will settle down in New York. It must be recorded that although two months in prison has reduced Mitchell in weight, it has not eradicated his love of stimulants.

AGRICULTURAL.

Hogs.

(By H. Ellis.)

The sow at breeding time should be healthy and in good flesh, not too fat, but fleshy enough too look good and smooth. The same will apply to the condition of the boar.

After breeding the sow should be kept in about the same condition. Her feed should be of the muscle forming kind. If in winter, skim-milk, or a slop made of ground oats or shorts, and bran mixed with water, clover hay, roots and a little corn. If in summer, she should have a run on the grass and will need but little other food. One very important thing she should have is exercise. In summer she can get this grazing. In winter she should have something to do. A good plan is to let her run in the barnyard and root over the manure or anything to give her exercise. She should have dirt or gravel, or both when she can get them. Don't shut her up and keep her in a small pen just large enough to turn around in and expect good strong pigs.

Just before farrowing time see that her bowels are loose and move freely. This can be regulated by feeding grass roots or clover hay quite freely. A few days before farrowing she should be placed by herself, with a chance to make her nest and be alone. Don't let her have too much bedding. After farrowing she should be fed very light. A little warm water with a handful of bran or shorts, and gradually increase the ration in quantity and quality until the little pigs are about two weeks old, when she should have all she can eat of good nourishing food. Something that will make her give milk. I find that skim-milk is one of the best, bran and shorts slop is good, and I think she should have some corn.

SPRING PIGS.

I wish now to talk about spring pigs. I like to have them arrive in April, soon after the snow is gone so that as soon as they are able to run about they can get to the ground. Don't keep little pigs confined on a board floor. Let the little fellows run with their mother until she weans them herself, which will be in about three months if she is a good milker. If you wish to raise another litter in the fall you can usually breed her when the pigs are three weeks old if she is in good condition. If you do this the pigs should be weaned when two months old, but I think one litter in a year enough for a sow.

But to go back to the pigs again. I like to get the little fellows to eating for themselves as soon as possible. To do this, make a feeding place for them where the mother cannot get to them. Give them a little warm skim milk in a small trough at first to coax them to feed, and keep increasing the feed, giving them all they will eat up clean three times a day. Keep on giving the milk if you have it, adding some shorts. This I find to be the best feed to grow young pigs. If you haven't the milk mix the shorts with water. Get the pigs on pasture as soon as possible. Clover is the best. I thing they should have a little corn with their other feed.

FEEDING.

I find it a good plan to sow some field peas. These are ready to feed in July or August. I think the best way to feed them is to fence them and turn the pigs right in and let them help themselves. You can then make the slop thinner just for a drink, or give water. Keep feeding a little corn and give them pasture still if you can. Don't give too much corn while they are growing; if you do they will be little fat chunks and will not get to be any size. I try and have enough peas to last until September. Then I commence to increase the corn they will eat up clean, letting them still have the run of the pasture. Pigs fed in this way will make the nicest light bacon hogs and will average 200 pounds or more a piece at six months old.

WHEN TO SELL.

This class of hogs generally sells the best in September or October. My reason for selling at this age is this: I find that the pig will make a greater gain for the feed consumed the first month than he will the second, and the second he than will the third, and so on. So that the sooner we can get him ready for market the greater the profit. Fall pigs should be fed as near the same way as possible. They ought to come in September or before, so as to give them a start before winter. They can be fed pumpkins in the fall. After the grass is gone they should be fed roots and clover hay. Their slop should be cooked or fed warm, at least in winter. They should have a warm place to sleep in, also to feed in, and a chance to get exercise. Keep the pigs growing from the start to the finish. It takes some feed to support life, when you pass this amount you get the gain. So that if your pigs are not gaining, you are losing your feed.

Don't keep more hogs than you can feed and care for well. Hogs should have salt regularly, an occasional feed of ashes, charcoal and sulphur.

For breeding sows save the best pigs from the best mothers, and be sure the mothers are good milkers, also have a good disposition. There is as much difference in sows in this respect as there is in cows. Keep well bred hogs of the breed that suits you best.

Ice for Summer Butter.

Verily, there is a difference in people. Occasionally we see a farmer head and shoulder above his neighbors in prosperity. His crops are big, his cattle thrive, he gets a good price for everything he sells. His neighbors regard him with envious eyes. "Brown is the luckiest man I ever saw," they will say. "Everything he touches turns to money." They wonder how it is, that though they work as hard as Brown, they never have his success. The secret lies just here: The details of farming, which most farmers ignore, as of too little consequence to bother with, are the very points which claim special attention from Brown. And it is on these seemingly minor matters that hinges the difference between Brown's and his neighbors' prosperity. For instance, as with his neighbors, butter is an important product of his farm, a large quantity being made in the summer months. Now, instead of carrying soft, oily butter to market, Brown employs some of his winter leisure in putting up ice. In the summer his cream and butter are kept cool, and a firm, good grade of butter is made, which, being such a rare article at the season, finds ready sale to private customers at a good price. And so what his neighbors term "luck" is simply good management on the part of Brown.

It is truly surprising that farmers generally do not attach more importance to the ice crop as an aid to summer butter-making. City residents regard ice as indispensable in preserving the small amount of butter and other perishable food, they keep on hand. But on the majority of farms, where butter-making is carried on as a business, ice is wholly unknown. It is impossible to make good butter in the heat of the summer months without ice. The consequence is thousands, yes, millions, of pounds of soft, buttermilky butter, is sold during these months, for which but a low price is paid; and much of which eventually goes for soap-grease, since the keeping quality of such butter is so poor. Whereas, if ice were employed in the making, a good grade of firm butter could be made which would sell for more in the market, or would keep, if packed, for the fall rise in the price of butter.

Many people have an idea that it is a difficult matter to keep ice during the summer. But such is not the case. An ice-house can be easily constructed, at very little expense, of rough boards. It should have a northern location and be placed, if possible, in the shade of the other buildings, so the sun will not strike it. It should be as air-tight as possible. The ice should be placed in a compact body, with sawdust or chaff between the layers of blocks.

Farming is too laborious and unremunerative an occupation for any of the farm products to be sold at so great a sacrifice as is made on butter during the summer months. For when a farmer sells butter at ten cents a pound, the price it often falls to in summer, he does not get back the cost of production. And wise is that farmer who employs his help and horses during the winter leisure, when other work is at a stand-still, in securing a winter crop of butter. In the long run he will find himself the possessor of many extra dollors in consequence. And as it is now mid-winter, these suggestions can claim the merit of, at least, not being out of season.

The Bots in Horses.

The common gad-fly and its eggs have been diagonized by an American agricultural experiment station, and the result shows that the bots is not nearly as dangerous as generally supposed.

The common gad fly (Gastrophilus equi) attacks the animal while grazing late in the summer, its object being, not to derive sustenance, but to deposit its eggs. This is accomplished by means of a glutinous excretion, causing the ova (eggs) to adhere to the hairs. The parts selected are chiefly those of the shoulder, base of the neck and inner parts of the forelegs, especially about the knees, for in these situations the horse will have no difficulty in reaching the ova with its tongue. When the animal licks those parts of the coat where the eggs have been placed the moisture of the tongue, aided by warmth, hatches the ova, and in something less than three weeks from the time of deposition of the eggs the larvæ have made their escape. As maggots they are next transferred to the mouth and ultimately to the stomach along with food and drink. A great many larvæ perish during the passive mode of immigration, some being dropped from the mouth and others being crushed in the fodder during mastication. It has been calculated that out of the many hundreds of eggs deposited on a single horse scarcely one out of fifty of the larvæ arrive within the stomach. Notwithstanding this waste the interior of the stomach may become completely covered (cuticular portion) with bots. Whether there be few or many they are anchored in the situation chiefly by means of two large cephalic hooks. After the bots have attained perfect growth they voluntarily loosen their hold and allow themselves to be carried along the alimentary canal until they escape with the feces. In all cases they sooner or later fall to the ground, and when transferred to the soil they bury themselves beneath the surface in order to undergo transformation into the pupa condition. Having remained in the earth for a period of six or seven weeks, they finally emerge from their pupal cocoons as perfect dipterous (winged) insects—the gad-fly. It thus appears that bots ordinarily pass about eight months of their lifetime in the digestive organs of the horse.

According to some authorities, bots seldom—not more than once in ten thousand times—cause colic. They may, when present in large numbers, slightly interfere with digestion, but beyond this they are, with these few exceptions, entirely harmless. It is entirely useless to attempt to dislodge them from the stomach, and they will go at their appointed time, which is mostly during the months of May and June.

A Circular Rainbow.

Many of the scientists and philosophers declare that a circular rainbow is one of the impossibilities, and give learned reasons in support of their opinions. About two years ago this idea was exploded by Dr. Fleming, who observed and made scientific notes of one he saw in the Webb mountains.

He says: "On Sept. 30, 1890, we mounted Finsterrehorn, and while near the top of the peak were treated to the rare sight of a circular rainbow, the phenomena lasting about half an hour and forming a complete circle.

"A second circle was also visible. We were near the summit of the peak when the first party observed it, and from that point the face of the mountian is almost perpendicular, giving a splendid view."

Mr. R. E. Armstrong, of St. Andrews, N. B., has written a letter to the Toronto Board of Trade urging that St. Andrews be made the winter port of any new line of Atlantic steamers which may be established. He gives the following reasons: 1. The port of St. Andrews is the nearest Canadian port on the Atlantic to Montreal and the North-west. 2. It is a commodious port with an abundant depth of water for the largest vessel afloat. 3. It can be entered at all times of tide by the deepest draft vessels. 4. It is open all the year round. 5. The harbor is well sheltered, it has good anchorage ground, it is free from dangerous ledges, and there are no rapid currents to endanger the safety of vessels. 6. It is capable of being maintained cheaply. 7. The Canadian Pacific railway skirts the water's edge, making it an easy matter to transfer freight. This is making out a good case, and indicates that Canada is not restricted in the number of winter ports.

THE FORMATION OF COAL.

Where Botany and Geology Unify Harmoniously.

Nature is still making coal, though, unfortunately, not at a rate anything like fast enough to make up for the consumption of this product. The processes may be watched from beginning to end. For this purpose one must first go to a peat bed, which is simply an accumulation of the remains of plants that grew and decayed on the spot where they are now found. When the upper layer of this material is removed one finds peat with 52 to 66 per cent. of carbon, and the deeper one goes the better quality it gets. It may be cut in blocks with sharp spades, the water may be pressed from the blocks, and they may be stacked up, covered and dried and used for fuel. There is a a certain kind of moss called "spagnum," which in large part makes up the peat-producing vegetation. Its roots die annually, but from the living top new roots are sent out each year. The workmen who dig peat understand that if this surface is destroyed the growth of the bed must stop; so commonly they remove the sod carefully, replacing it after they have taken out a stratum of peat. There is little doubt that if these beds of peat could lie undisturbed and covered over through many ages they would take on all the characteristics of mineral coal.

The substance of coal has been so compressed that the forms of the plants composing it can not usually be seen. But when a piece of it is made so thin that it will transmit light, and is then subjected to a powerful microscope, its vegetable structure may readily be distinguished. Immediately under every separate seam of coal there is a stratum of what is known as fire-clay. This stratum is always present, and contains in great abundance the fossil impressions of roots and stems and twigs, showing that it was once the soil from which vegetation grew luxuriantly. It is common also to find fossil tree stems lying mashed flat between the layers of black slate which form the roofs of coal mines as well as the impressions of the leaves, nuts, and seeds which fell from these trees while they were living. In some beds of cannel coal whole trees have been found with roots, branches, leaves, and seeds complete, and all converted into the same quality of coal as that by which they were surrounded.

Geologists are of the opinion that bituminous and anthracite coals were formed during the same period and under like conditions. Originally they were all bituminous, but during the violent contortions and upheavals of the earth's crust at the close of the carboniferous age the bituminous coals involved in that disturbance were changed by heat and pressure and the consequent expulsion of volatile matter from bituminous to anthracite. Cannel coal is a variety of bituminous coal which burns with great freedom, the flame of it affording considerable light. It was called "candle coal" by the English people who first used it, as it often served as a substitute for candles. The name became corrupted to "cannel" and has so remained. It is more compact than ordinary bituminous coal and it can be wrought in a lathe and polished. A certain variety of it found in Yorkshire, England, is manufactured into a kind of jewelry known as "jet."

Canada and Newfoundland.

The correspondence laid before the House last week in regard to the negotiation between the Canadian and Newfoundland commissions is interesting and important. It was clearly established that the only real solution of the outstanding difficulties between the Dominion and the Island lies in ultimate union. The conference was valuable, in that it established a better feeling and better relations. But it stopped short of a mutual recognition that the commercial and political interests of the two communities are essentially identical, and that in all international dealings this fact should be a paramount consideration. In the matter of a treaty with the States, for example, a separate arrangement between the Newfoundland and the American Government is incompatible with the fact that the Atlantic fishery question is a single question, and has always been recognized as such. The true interests of Newfoundland should induce her politicians to act with Canada in the matter. As part of the British Empire, the Island must see that closer relations with the Dominion are more natural and advantageous than any limited treaty with a foreign power. It is not necessary to rake up again the merits or demerits of the Bond-Blaine arrangement, which, apart from its intended injury to Canada, would to our view, have given an empty husk to the Island, while the kernel of the bargain passed to the astute Uncle Sam. The prospects of a fisheries agreement on a wider and more permanent foundation ought to be brighter, seeing that Mr. Cleveland agreed in 1888 to a settlement on a fair and honorable basis, and was only baulked in a statesmanlike plan by a hostile Senate now no longer in the path. The merits of the discussion are the same to-day as they were then, and the rejected treaty being mutually advantageous a fair, and square compromise ought to form a promising nucleus for re-opened negotiations under the incoming Democratic Administration. In any event, Canada and Newfoundland should stand together.

Britian and the Hawaiian Islands.

Fifty years ago Lord George Paulet planted the British flag on the Hawaiian Islands, and took possession of them in the name of Queen Victoria. The act, however, was unauthorized, and England determined to recognize the independence of the islands. In view of the present tone of the American press it is interesting to observe the attitude of the United States on that occasion. In protesting against British occupation Mr. Webster declared that the course adopted by the United States Government had for its sole object the preservation of the independence of the islands and it desired to exercise no control of the government of the islands nor to obtain any exclusive privileges. This, he added, had been solemnly declared in the President's message to Congress, and the President would exceedingly regret that suspicion of a sinister purpose of any kind on the part of the United States should prevent England and France from adopting the same pacific, just, and conservative course toward the Government and people of the islands. How far the United States is now prepared to adopt a pacific, just, and conservative course will be made plain in the near future.