The Forum

NOVEMBER, 1901.

THEODORE ROOSEVELT.

Anyone who has studied the character of the Emperor of Germany and the character of the President of the United States must be struck by the resemblance that exists between these two leading actors on the stage of great affairs to-day. They are wonderfully alike in a great many things — in their superabundant vitality, their fearlessness, their seeming disregard for public opinion, and their many-sidedness. William of Germany knows much of statecraft, the army and navy, and politics, and not a little of art, science, and literature. President Roosevelt knows politics, books, and what many readers of many books never learn — men; his knowledge of military affairs is more comprehensive than most people give him credit for, as he has studied the art of war from the best writers of the science; and he has the knowledge of naval affairs that comes from having been at the head of the Navy Department when the roar of great guns wrote the only page in modern naval history.

There is another striking similarity between the two men. William of Prussia came to the throne as the successor of two men in whom all the world had confidence — men who stood for all that was wise, cautious, and lovable. His grandfather had died crowned by the aureole of success, having created a nation, and having emerged victorious from a campaign that amazed the world. His successor was young, virile, hasty, untrained in statecraft, intolerant of counsel, heedless of advice. He believed in himself and in his country, whose magnificent resources the world was then dimly beginning to appreciate. President Roosevelt, on his part, succeeds a man whom the world had learned to regard as

Permission to republish articles is reserved.

THE DEVELOPMENT OF AFRICA.

AFRICA is now the land of golden opportunity. Victor Hugo said that Africa would be the cynosure of all eyes in the twentieth century. When Shakspere made his ancient Pistol exclaim, "I speak of Africa and golden joys," the poet was a greater prophet than he knew. Millions of his countrymen have since been echoing his words. Indeed, the refrain has been the cry of the whole world. The wonderful opportunity presented in what was termed a few years ago "The Dark Continent" has never been so pronounced and clearly revealed as to-day. Several prominent facts about the situation in Africa at present justify and illustrate this statement.

Africa is the last of the continents to be developed and settled. Its political outlines have been already defined, and are rapidly being fixed along logical lines. Its geographical position makes it a strategic territory, as was seen in the recent war with Spain, and has been illustrated frequently in history. It is of the greatest international importance, because it is the only large land mass that is divided up into parts assigned to the factious European powers. The continent is not only of enormous dimensions, but rich beyond the dreams of avarice in every kind of natural wealth. For the development of these resources there is at hand a tremendous force of labor — cheap, powerful, docile, and far more intelligent than is usually supposed. Standing now where America stood in the days of the youth of Washington, Africa looks out upon a wide world, and invites the conquering Caucasian in.

Africa's undeveloped condition constitutes one of its chief attractions. Unlike China and India, it is hampered by no effete and decaying civilization, impeding progress and constituting a continual barrier against every effort from without. The African native has nothing to give up before serving the purposes of the pioneers of progress. The new field can accordingly be worked by the most recent inventions and appliances. It is easier to build a new civilization than to make an old one as good as the new. The promoter of African enterprises approaches his task equipped with the railway, the steamboat, the telegraph, the

telephone, the steam or electric plough, the ice machine, the automobile, and all the other wonderful means of progress of to-day. Not only is it true that the mechanical contrivances for developing the country are such as vastly to facilitate the work, but the knowledge of mankind in every direction is so much greater than in previous centuries that Africa ought to profit thereby. Governments ought to be better, cities more beautifully designed, industrial installations more conveniently arranged, and every department of life ought to reap the advantage of the experience of the past and the power of the present.

The day of exploration in Africa is now over. It is to be succeeded by that of exploitation. There is left comparatively little unknown territory to be discovered, but there are whole empires to be built, and unparalleled realms of commerce, science, politics, transportation, mining, agriculture, and manufactures to be investigated. Colossal fortunes will be acquired, gigantic companies operated, and herculean tasks performed in this work of subduing the last of the white man's heritage to complete submission.

African territorial questions formed in 1884 the subject of an international conference at Berlin, over which Prince Bismarck presided, and at which the principal powers of the world were represented. The chief results of this convention were the apportionment of parts of the continent among the powers of Europe, the prohibition of the slave trade, the prohibition of the liquor traffic in Central Africa, the agreement that for a zone in Central Africa as large as the whole of Europe the tariff on imports should be uniformly at the low rate of six per cent, and the opening of the navigable rivers to the commerce of the world.

Since that conference the appropriation of the continent by the powers has proceeded at a rapid rate. Not a square mile of land remains over which sovereignty is not claimed, and in most cases effectively established, by some organized government. Scores of steamboats ply the waters of the rivers, railways are being built in every part, commercial companies operate all over the land, the natives have turned from eating each other to working on the railways and mines and buying Armour's beef, and men who chased Stanley down the Congo are now piloting steamboats up. England controls Egypt, the Niger, the Upper Nile, Uganda, the stretch between Victoria Nyanza and Zanzibar, and most of the Zambesi valley; she will soon be paramount in South Africa also. France controls most of North Africa, the Sahara, the Central Soudan, the Senegal, most of the north bank of the Congo, and a large part of West Africa. Germany has three large colonies in West Africa

and one in East Africa. Portugal owns nearly 1,000,000 square miles in East and West Africa. The King of Belgium is sovereign of most of the Congo valley, a territory nearly as large as the valley of the Mississippi. In a country as large as the United States, where twenty years ago there was not one white man, there are now thousands engaged in peaceful and lucrative trades and pursuits. Some of the business companies have made enormous fortunes, and the commercial centres of Europe have been in a ferment over the exploitation of their parts of the Dark Continent. Gold, diamonds, rubber, palm-oil, timber, hides, ivory, copper, coal—all these and more have shown that there is vast wealth in the land of Ham.

The geographical position of Africa gives it great international importance. It stands sentinel over the chief route to India and the East. The professor of tactics in a British military college has recently called attention to the fact that the military occupation of North Africa by the French seriously threatens British supremacy in the Mediterranean. The control of Africa by the Mohammedans once nearly destroyed European authority, and menaced the Caucasian world for a thousand years. The power that wields most influence in Africa is likely, sooner or later, to dominate Europe. The war in South Africa is more than any mere assertion of a local suzerainty: it is part of an immense and determined policy to control the whole African continent for the interests of the British Empire. England would have fought France over Fashoda as readily as she is fighting the Boers. The most aggressive statesmen in the world mean to control Africa, and to have no such blundering as that of Lord North in America. It is inspiring to watch this play of the Titans for dominion; it is exhilarating to share it. Another important fact, not as fully appreciated as it deserves, is that Africa is the continent most accessible to all parts of the world. It is next to Asia in size, and so immense that it contains nearly four times the land area of the United States. It is the only one of the large continents that is completely circumnavigable.

The internal geography of the continent has an important bearing on its commercial future. The very causes of the long delay in penetrating the interior now prove the white man's best friends. One obstacle was found in the high mountain ranges running parallel with the coast; making insurmountable cataracts in the rivers, and hindering entrance otherwise. These cataracts now afford power for the generation of electricity, by which trains will speed through the mountains into the interior. These mountains themselves afford seats for the Caucasian from

which he can administer the rest of the land. They enclose elevated plateaus far more healthful than the coast which gave Africa its bad name. There are four distinct river basins of the first class: those of the Nile, the Niger, the Congo, and the Zambesi. These rivers are navigable for immense distances. Their basins are alluvial, the adjacent plateaus fertile, and their watersheds as healthful as any one could wish. The Sahara has been found to abound in water just below the surface, so that artesian wells can turn the desert into a garden, and the passage of a railroad across its sands can be easily effected.

The special inducements offered by Africa to the capitalist or the colonist are mainly the security of European government, with treaty rights for all, the extraordinary natural resources, and the cheap and efficient labor.

All over Africa are now established stations of the different European powers, manned by white men and civilized native soldiery, placed at the most important points, and affording security to life and property. When titles to land are purchased by any one in these districts, it becomes the duty of the government granting them to guarantee security with them. All the powers are obliged by international treaties to grant these titles without discrimination. The price of land for agricultural purposes in Central Africa is forty cents an acre. The taxes for all purposes, including dues on imports and exports, all special licenses, and every kind of governmental obligation, do not exceed a total of ten per cent on the value of property and merchandise. The transportation companies are held legally responsible for the delivery of freight, and goods may be shipped from any point in America to Central Africa on a through bill of lading. Postal arrangements have been so perfected that there are regular post-offices all over the country, and the service is under the regulations of the Postal Union. The time of communication from New York to the heart of Africa is now twenty-five days.

The natural resources of Africa are varied, and occur in quantities to stagger belief. Of the minerals there are precious stones, diamonds, coal, petroleum, and petrified gums; of the metals there are iron, gold, copper, and lead; of vegetable products, rubber, palm-oil, timber, peanuts, corn, mandioca, coffee, cocoa, rice, plantains, bananas, kola, oranges, limes, guavas, mangoes. Indeed, every plant and vegetable known flourishes on some part of the land. Of animal wealth there are herds of buffalo and of all the tropical beasts. The rivers abound in fish, and the woods are full of wild-fowl.

Before describing the resources of Africa in detail, it is well to note

that as yet there has been only the slightest investigation of the natural wealth of the country. There are vast territories whose possibilities have never been determined. There are enormous quantities of all kinds of produce and crude material which have not yet been touched, as well as wide territories whose resources have not been examined.

The wealth of Africa in precious stones and diamonds is so well known as not to need much comment. These are found chiefly in South Africa; but they are widely distributed over the whole continent, and have been associated with the locality of Kimberley only because the long-settled colony of the Cape developed them so rapidly. About \$30,000,000 worth of these stones has been produced annually, and the productivity of the mines is on the increase.

Probably the largest coal-field in the world is in the upper Zambesi valley. When the building of transcontinental railways has begun in earnest, the mining of this coal will be a great industry. In view of the facts that on the West Coast of Africa the price of imported coal is \$15 a ton, that there is now a large demand by steamers, and that railways are being constructed in many parts of the country, the utilization of this coal ought to be the work of a few years only. Petroleum oil issues forth in several places in natural springs, which have been regarded by the natives with superstitious wonder. The gums of Africa are many and varied. I once came upon a bed of buried copal, and found that it was acres in extent.

The iron ore in Africa is of enormous extent and fine quality. It occurs all over the continent, and for centuries the natives have been in the habit of reducing it and making from it certain articles for their own use. There are several different ores, the most noticeable being the brown hematite and the black magnetite. The natives have small furnaces built of clay, using charcoal for fuel. The pig iron they thus produce is really of good quality, and their blacksmithing is wonderful. With coal and limestone in the same formation as this fine iron, the future possibilities of the iron industry there are not the least of Africa's opportunities. I discovered a solid mountain of black magnetic iron ore, which deflected the compass a quarter of a mile distant, and the rocks of which, when struck with a hammer, rang like an anvil. There were fine crystals of pure iron scattered throughout the mass.

The annual output of gold in Africa now amounts to a total of over \$40,000,000 per year. The gold-bearing countries have hardly been touched as yet. There are vast regions undoubtedly rich in gold which have not yet been exploited at all. In some parts of the continent it

was long the custom of the Africans to barter gold-dust for equal quantities of salt. The new methods of treating the gold ores which obtain in South Africa are calculated to save large quantities of gold which were formerly wasted.

The most widely mined and commonly used metal in Africa is copper. The ores of this metal occur in almost unlimited quantities; and considerable mining is done by the natives, though their methods are of the simplest. Strange to say, the whites have practically done nothing in the copper industry, though there is a large demand for copper at the gold mines, where it is used in extracting the gold from the ores. Lead is found in connection with the copper deposits.

The enormous dimensions of the rubber trade may be illustrated by mention of the fact that the value of the rubber imported annually into the United States is greater than the annual production of gold. In the year 1899 its value was about \$35,000,000. The greater part of this rubber came from South America. It has been found only recently that the forests of Africa abound in rubber of the finest quality, in almost inexhaustible quantities, and easy to obtain and market. The crude rubber is usually collected in the forests by the natives, who carry it to the stations on the navigable rivers, where white men buy it from them, giving in exchange cotton cloth, salt, beads, tools, and other articles of home manufacture. The profits usually made on this rubber are enormous, as the natives sell it for a very slight part of its real value. It is common for a pound of raw rubber to be bought from the natives for a yard of white sheeting, at a time when the price of that pound of rubber is a dollar in the markets of Europe. Even after the heavy expenses of transportation and all other charges are paid, this rubber trade pays the companies engaged in it larger dividends than are made by the gold mining companies of South Africa. The price of rubber has been steadily rising in the market for the last few years, notwithstanding the increased production. The development of electrical appliances, the bicycle, the automobile, the rubber tires - all these make the demand for this article quite heavy. The forests of Africa will be able to supply thousands of tons of the crude material as fast as the trade is developed. An intelligent and industrious trader can buy, in parts of Africa known to me, as much as fifty tons of rubber annually without difficulty, at the gross value of \$100,000, in exchange for merchandise costing only \$5,000. The method of gathering this rubber need not destroy the vine or tree from which it is procured; and the sources of the supply are almost unlimited. As will be shown later, the cheapness of labor is one reason

for this great opportunity. The rubber forests occur chiefly along the large navigable streams, thus facilitating the transportation.

Palm-oil has long been a principal article of export from West Africa. This oil is extracted from the nut of a palm-tree growing all over the continent. The tree produces a large bunch of kernels covered with a fibrous integument, which is full of a rich oily substance. The natives gather the nuts and pound them in large wooden mortars. They then put the pulp into a pot of water and boil it until the water is evaporated, when the fibrous matter and other impurities are skimmed off the surface, leaving the pure oil. This is used in the native cookery, and also, to some extent, in that of the Europeans. It is also largely exported for use in the manufacture of soap, as a cheap lubricant, and for the purposes to which vegetable oils may be put. The tree on which these nuts grow is the same as that from which is obtained the famous palmchampagne. It produces about 100 pounds of the nuts per year, yielding about twenty pounds of oil. The tree is the principal ornament of the plains, as the rubber vine is of the forests. A square mile of an African savannah will average about 1,000 of these trees in the native state, capable of producing ten tons of oil per year. Of course, the planting of the trees would produce a greatly increased yield. This same palm furnishes material for house-building and for furniture, the covering for roofs, the fibre for cloth, and the splits for mats. Its tender core when young makes a relished vegetable resembling cabbage.

The day is not far distant when Africa will be called upon to supply a large part of the lumber of the world. The exhaustion of the forests of other continents leads to a serious problem, and one of the most fortunate facts about Africa is that the supply of timber is so immense. In Central Africa alone there is an area of over 1,000,000 square miles entirely covered with heavy forests, whose proximity to the navigable rivers allows of their easy utilization. There are many valuable hardwoods beside woods that are capable of being easily worked. Many of the trees are of enormous size, while the thickness with which they grow in the forests is almost incredible. As yet, little has been done to utilize this great supply of timber.

In the matter of the raising of agricultural crops and fruit, it is to be observed that there is a great diversity of soil and climate, from the summits of mountains covered with perpetual snow, or the temperate regions of Algeria and the Cape, to the blazing equator. Anything raised in Europe or America can be raised in Africa. But it is in the tropics that the wonderful richness of agricultural resources appears.

The soil is so rich, and the heat and humidity are so great, that the production is amazing. Corn or maize is grown at all seasons of the year, and one may have ripe and green corn in the same field. A yield of 100 bushels to the acre is ordinarily expected, and two or sometimes three separate crops are reaped in one year. The mandioca is the staple article with the natives. From it tapioca is made. The roots of this plant may be pounded into a fine flour. The yield of an acre in mandioca is ordinarily about 30,000 pounds, or twice the largest known yield of wheat. This proportion of yield is true of most things. The plantain, a delicious and nutritious food, yields as much per acre as the mandioca. Potatoes need never be taken from the ground, save as needed for the table. A single potato patch, once planted, grows on indefinitely. Cotton is a perennial plant. There are many fibrous plants from which the natives make ropes, but which have not yet been utilized by the foreigner. Sir William Crookes has lately called attention to the coming limit of production in civilized lands, and the importance of the tropics as sources of food. The exchange of manufactured articles for the raw material of those regions will be the commerce of this century, and Africa has more available land for the raising of these supplies than any other part of the world.

The country is equally rich in animals, wild and domestic. The wild animals of commercial value are the elephant, the antelope, the hippopotamus, the crocodile, the buffalo, the boar, and the ostrich. These are valued for either their tusks, their hides, their feathers, or their meat. Of course, there are other wild beasts which have some value. Then there are many birds good for food, such as the goose, the duck, the pigeon, the guinea, the quail, and the peacock. Of domestic animals, the sheep, the goat, the hog, the cow, and the usual domestic fowls are common. The cattle-raising industry is in its infancy, and the wide plains offer boundless room for that enterprise.

The ease with which the necessaries of life are produced may explain the remarkable cheapness of labor in most parts of Africa. In vast regions of the continent the wage paid to ordinary labor amounts to about three cents a day of our money. This includes everything. This low wage may sound like a hardship but when the price of a fowl is a spoonful of salt, when a bushel of corn may be purchased for ten cents, when more than a few yards of clothing would be uncomfortable, and when a single palm-tree will furnish house, furniture, oil, and beverage, without being cut down, it will be understood why the Africans flock to get employment from the white man at these rates. I have turned off

hundreds of men begging for work at such wages, and if I had had the means I could have employed thousands. The employment of labor is facilitated by the customs of the country, according to which the chief, or king, exercises such large authority over his subjects that a contract may be made with him for any number of men for a specified time, agreeably to the desires of the men themselves. Another factor in the labor problem is the universal custom for the women to do such a large share of the manual work. Previously to the advent of the white man, the men could live on the agricultural labors of the women. Now, when the men work for the foreigner, the women still continue to work also, and this fact contributes immensely to the gross product of the country. The coming of the white man trebles the product of the country at once.

The quality of this labor is astonishingly better than might be expected. The laborers work all day long without much complaint, and many become skilled artisans with a little training. Their docility, obedience, and alacrity make them pleasant to work with. In Central Africa there are now carpenters, masons, pilots, and engineers who ten years ago were eating their people in the bushes.

With labor as cheap as this it need not be surprising that slaves have been equally cheap. The usual price of a grown man in Central Africa has been about \$3, and thousands have changed masters at that This may give some idea of the profitableness of the slave trade in the old days when a slave brought \$500 at the port of entry. Though the ocean trade has ceased, and the internal traffic is forbidden, there is still a good deal of exchanging of men for goods going on surreptitiously in the continent among the natives themselves. Then there is a veiled form of slavery still practised by many of the whites, who induce the blacks to sign long-term labor contracts by making their marks on a prepared paper, thus coming within the letter of the law. But most of the slaves greatly prefer thus to get under the protection of the white man to being exposed to the dangers of their own towns, where they are liable to be eaten, or sacrificed on funeral occasions. One of the noblest enterprises in the world would be the establishment of industrial plants, where these unfortunate people could be safe and could be put to remunerative employment. The vast numbers of this class lend the high character of true philanthropy to every effort to develop the continent and to give these people a living with security.

Commerce in Africa necessarily depends on the exploitation of the natural resources mentioned above. Immediately after the cessation of

the external slave-trade all commerce languished, until the results of the great geographical discoveries of the last thirty years began to appear, and it became evident that Africa was rich in much besides men. The products of the country were in demand in Europe and America, and soon large commercial companies began to be formed in order to trade with the natives on a regular basis. The Portuguese had been the pioneers in this way, and their merchants had established stations in many parts of the country. Then the Dutch came also to the front in seeking to buy the ivory, gold-dust, palm-oil, and other produce from the Africans, who are keen to engage in trade. The British followed suit, then the Belgians, the Germans, the French, and the Scandinavians. Now the British commercial influence is, of course, the largest; and there are some companies capitalized at many millions, with posts all round the coasts, and penetrating the remote interior. There are about a dozen different steamship lines running from different European ports — Liverpool, Antwerp, Rotterdam, Hamburg, Marseilles, and Lisbon - which connect with the various African railways and river steamboat lines. *

The most interesting feature of African commerce is the direct bartering with the natives. Let us look at a trading station in the heart of the continent. A large clearing has been made in the forest which rises up from the river's bank. The river is about the size of the Missouri at Kansas City, and the clearing is of about 200 acres in extent. Several houses, each perhaps as large as Washington's house at Mt. Vernon, are placed above the river, being the dwellings, storehouses, and trade house of the establishment. These buildings are constructed of bamboo from the palm, and have clay floors raised above the ground by filling in a rectangular enclosure of posts with earth to the desired height. Behind the large houses are a number of smaller ones for the native servants and employees, numbering perhaps a hundred persons. A file of natives from the surrounding country may be seen coming up to the principal houses, laden with ivory, rubber, palm-oil, and fowls, and all heavily armed with spears, bows and arrows, and knives, or an occasional They call for the white man, and soon he is in the thick of the trade. He must watch well, and know his business, for these Africans are no fools, and will do all they can to outwit him. Some want salt, some cloth, some beads, some brass wire, some hoes and knives. Then they must all have a present at parting, and when they go each is full of how he got the better of the trader.

Perhaps a steamboat may be arriving. The whole population sets up a mighty yelling, and everybody makes a rush to the landing. The

cargo is discharged, the mail is secured, the crew are made happy with fresh food, and the white men repair together to exchange greetings and the news of the country. Then the steamer is loaded with the cargo in the store for shipment, and proceeds on its way to gladden the heart of some other settler. Sometimes there are several white men at these posts, but frequently they are manned by one alone, with his native attendants. The natives with whom he trades live in the adjacent country, and are coming and going all the time. In Central Africa it is customary for these traders to stay on the field about three years, and then to return home for a rest. Some of the trading stations are improved by their occupants, and made quite neat and attractive. Some of them are the beginnings of what will become the Chicagos and Pittsburgs of the Orient.

The progress in methods of transportation is one of the most marvel-lous instances of the disappearance of the last strongholds of ignorance and sloth. In 1873 it took Cameron three years to march from the Upper Congo to the West Coast. That trip can now be made in one week. The universal pack-animal for centuries was the African himself. He carried on his head all the goods for the markets, and furnished the power for propelling the canoes. How slowly affairs in Africa moved under such circumstances can be imagined. The transportation of heavy articles and machinery was impossible. But the advent of steam changed all this. There are now about fifty steamboats on the Congo, some of them with a tonnage of 250 tons, and making fifteen miles an hour against the current of the river. The other rivers are being similarly supplied.

Then, the most stupendous railway plans are on foot. The war in the Transvaal has interrupted the progress of the great transcontinental line from the Mediterranean to the Cape; but already about half of its 5,000 miles is completed. The French are building a line across the desert of Sahara. Around the cataracts of the Congo the Belgians have built one whose stock recently stood at 4,000 on the Bourse of Brussels, the par value being at 100. The British line from Mombasa on the East Coast to Uganda is nearly completed. This will be the most important feeder to the Cape to Cairo line. The Portuguese have a good line in Angola. The Germans are building two lines, one in the east, the other in the west, of the continent. The French have one in Senegal, and one projected to the north of the Congo. The British have one in Sierra Leone, and several at the Cape. An American, Mr. Mohun, of Virginia, is engaged in constructing an east and west transcontinental telegraph

line under Belgian auspices. Two independent cables operate on the coasts, and the telephone has reached the far interior. There will be, in the near future, an immense demand from Africa for rails and all sorts of railway equipment. The building of these lines will stimulate every industry, and the land will take on new life.

It is probable that the development of Africa will be the work of organized corporations and governments rather than of individuals and small companies. The conditions require united effort in order to accomplish the large ends desired. There will be massed together, in different undertakings, great numbers of native laborers who will require the intelligent and sympathetic oversight of capable foremen. The plantations will be worked, like the great industrial enterprises of America, by the association of large numbers of men. Concessions will be much more easily obtained by large corporations than by private persons. The aggregations of capital already in corporate hands in Europe and America will find it practicable to operate these concessions, and "Soudan Central" stock will be as well known in the financial world as any one of our great trunk lines.

In the service of these corporations there will be room for the exercise of the most splendid talents; and the opportunity to seek to preserve the best qualities of the individual, while utilizing the principle of coöperation to the fullest extent, will be appreciated by the wisest of our generation. It is true that there is no incentive to effort such as that given to individuals under the spur of necessity, and no motive for the advancement of any country or people stronger than the knowledge that one reaps fully what he sows. Where the aggregated efforts of many are to take the place of the separate forces of the individual colonist, as in Africa, the utmost exertion is needed to quicken the sense of responsibility, and to maintain a high standard of personal efficiency. It ought to be the policy of the companies operating in that new land to secure as agents men of exceptional ability, of the strictest probity, of broad education, and of high attainments; remembering that these men are laying the foundations of the future of a whole continent. Undeviating adherence to this policy will make every white man in Africa what he ought to be - a torchlight of civilization. The white men in Africa for the next fifty years are to build for "millions yet unborn." What unparalleled privileges are theirs!

It is interesting to consider the exact means by which the white control and direction of Africa will be carried out. For a long time it has been debated whether the Caucasian can live and labor in Africa at all. When Mr. Henry M. Stanley took the affirmative side of this question at one of the meetings of the British Royal Geographical Society he was met by the warmest opposition. But the fact that Africa is to be a white man's land is now a foregone conclusion. The way in which this will be practically accomplished is interesting, and carries us back to some geographical facts. In brief, the high, mountainous, healthful, and invigorating parts of Africa are on the slopes of the mountain ranges and on the watersheds of the great rivers; these regions being distributed all over the continent, instead of massed together in any one part. In these regions the Caucasian can live and labor. From them he will govern and direct all the rest.

There will be maintained in these parts great industrial training schools, where the best of the natives will be trained to act as directors of industries in the lower river valleys and the alluvial littoral. telegraph, the telephone, and other modern means of quick communication will be used to keep in close contact with these men and their work. All the results of medical and sanitary progress will be invoked to assist in this task of holding the land for its rulers. Some of the Africans may show special aptitude for higher positions, and to a limited extent they will be given opportunities to fill them; but for the most part they will constitute the laboring class, and will thus help where they are best fitted. With ice factories, electric fans, water-works, scientific plumbing and sanitation, and all the accompanying means of making life comfortable which will follow the development of Africa's natural riches, the Caucasian will be able to live and prosper in the wisely selected parts of the continent not only in safety, but in great comfort and happiness, and from these central stations to operate the whole of Africa.

The profitable and pleasant features of life in prospect in Africa during this century will not be confined to commerce and industry. In science, religion, architecture, government, education, and all other phases of life, the freshness of the conditions presents the same unique opportunities. The man of science will find the most delightful and absorbing occupation. The botany, the geology, the entomology, a large part of the zoology, the meteorology, the mineralogy, and the physical geography of the continent need to be studied and written. Travellers have rarely been able to do satisfactory work in this line owing to their transitory movements. I lived for two years near a village of those remarkable little people, the African Pygmies, a study of whom would afford the anthropologist the keenest delight. The ethnical questions presented in

Africa are of the most far-reaching kind, and carry one at once into the most difficult problems of evolution, derivation, comparative anatomy, and archæology. Where, for example, did the Pygmies come from? Why are there races, in the very centre of the continent, whose light color, aquiline features, noble mien, and high intelligence suggest that they are the remnant of some vastly superior race?

In medicine, there is a world of new work awaiting the investigator. The sleeping sickness, fevers, malaria, and contagious diseases are to be studied, and their ravages checked. A skilful practitioner will be able to make a fortune and do an immeasurable amount of good by treating the natives alone. The medical man gains the good-will of the natives as no one else can. Then there are many plants and herbs whose medicinal properties could be examined, no doubt to the enrichment of the pharmacopæia, and possibly to the benefit of all mankind. The herbs in use among the natives would alone form a profitable study.

The practical scientist will be in great demand in the development of the industries of the country, since science has come to play so important a part in the ordinary operations of manufacture and production. Thus the application of chemistry to the mining industry, especially in the extraction of gold by the use of cyanides, saves in South Africa millions of dollars that formerly were wasted. Especially will the electrical expert and the civil engineer find ceaseless employment. Indeed, the room for practical scientists in Africa is boundless.

The work to be done in the spheres of education and religion is so vast as to need more detailed mention than is possible here. The whole land is beginning to be filled with schools, missions, colleges, and industrial training establishments; but the need is immeasurably greater than the supply. A word of warning can be spoken here. What the African needs is not so much the higher refinements of education as the simple rudiments thoroughly drilled into him, with the emphasis on the manual training. He requires to be taught to work, and to work hard, with skill and intelligence; to be taught to save, to accumulate property, to build homes, to live at peace, and to work with and for the white man on terms of good-will and friendly cooperation. Above all, rivalries and jealousies between different denominations are to be deprecated. The harm done by such conditions is more than the good done by most well-meaning enthusiasts. The Christian religion never profits in barbarous countries by the zeal of the propagandist or the energy of the proselytizer. The African will ask: Why all this confusion, if all that the white man says is true? Let each denomination have its clearly defined sphere, and let the war of creeds come after the essentials have been believed, if at all.

One of the most promising and least appreciated opportunities is in the field of architecture. Where new cities are to be built from the beginning, the chance to build wisely and beautifully according to a wellarranged plan ought not to be neglected. The student of geography and natural resources can tell where the great cities must come, and therein is a magnificent work to be done in laying out broadly the lines for the future. So much colonial architecture is crude and inconsiderate of the future that the various governments ought to see to it that the interests of future generations are secured in this matter. The city of Washington owes much of its beauty to the wise and far-seeing conception of its great founder. Let no African cities grow up by helter-skelter aggregation, or force the inhabitants of the future to "follow in the footsteps of the calf," when a few simple precautions can insure the outlines of artistic beauty and urban convenience for ages. Let the buildings be easily capable of addition, or of displacement, and wherever possible let them be monumental. If Egyptian architecture could leave the pyramids for thousands of years the wonder of the world, cannot the Teutonic race equal them in the grandeur and permanence of its structures in the same land? With all our wonderful advance much of the architecture of America is of the mushroom kind. Staff, stucco, and cement form too great a temptation to our people.

The most serious question, from the point of view of the lover of constitutional or republican government, is the fact that so much of Africa seems likely to remain under the powerful hands of strongly intrenched empires. With the disappearance of the South African Republic and the Orange Free State, Liberia alone is left as the representative of our form of government in Africa. It is true that France owns the most territory there; but the French form of colonial administration is not home rule. There is, however, this important fact about the relations of the colonies and their home governments. The progress of liberal ideas has been such of late years that the most monarchical European powers strive to make their colonists as free as possible, so as to retain their affection and loyalty. The American Revolution taught Europe an immemorial lesson on this subject, and the wisest statesmen of that continent are seeking to profit by it. They must do this or lose them all some day. England may conquer the Transvaal now, but fifty years hence a revolt in Cape Colony by her own sons would deprive her of every foot of territory from the Cape to Alexandria. Europe

must rule Africa wisely, or some day the story of Hannibal will be revived by some white son of a new Hamilcar. Then woe betide the Romes of that day! There is another safeguard in the fact that Africa is so subject to international complications. Oppression in one colony will lead to migration to another. England cannot afford to incur the ill will of Germany when the territories of each are contiguous. It is not merely the Briton, but the white man, that is to govern Africa. The lessons that America would fain teach her mother-country may be taught her by force in Africa.

The subject of the relations of the white and black races in the future of Africa is the most important one just now. On the part of the natives of that land it is absolutely necessary to their very existence that they recognize the coming domination of the foreigner, and be willing to submit to it cheerfully. This must be their attitude, or they will disappear before it. Some writers are disposed to think that they will gradually be exterminated as the American Indian. But between these two peoples there are essential differences amounting to a refutation of this supposition. The Indian occupied a temperate zone, which was especially fitted for the settlement of the Caucasian, and had to get out of his way. The case is different in Africa. The negro is a necessity to the development of three-fifths of the continent, and is the white man's most valuable assistant in that work. Moreover, the negro, unlike the Indian, will work, and really likes to work, under the white man, when at all justly treated. The negro has been in contact with the white man for ages, and has never yet disappeared under that contact, whether in America or Africa. The mere fact that the negro now occupies the land formerly owned by the Indian in the Southern States of America is enough of itself to illustrate this truth.

There will probably be a concentration of the negro in the tropical parts of Africa, as the rest of the land is taken up by the newcomers; but there he will remain, for it will be to the interest of the Caucasian to keep him there. In the building of the Congo Railway the experiment of introducing Chinese as manual laborers was made, and hundreds of them were imported. Nearly every one of them succumbed, and it was found that the white man himself stood the climate better than the Chinese. The road was completed by negroes from the West Coast under the supervision of Belgians, Dutch, and Italians. When the negro finally understands the irresistible character of the ingress of the European he will submit, as he has always done in such cases, and then he will find that such a course is for his own best interests. The task

will remain for the white man to utilize him for the benefit of all concerned.

This will test the wisdom of the dominant race to the highest degree. In the first place, the experience of the Southern States of America ought to be studied, that the mistakes made there may be avoided. The negroes must clearly see from the first that their power in politics as a unit is gone. Only the very best of them ought to be allowed to participate in the government, and then only to a limited extent. No sentimental ideas on the subject of social equality ought to be allowed. Each race must keep to its own social lines. Miscegenation must be forbidden; the whites must take their own wives with them, and let the African women alone. The natives must be secured in their homes, property, lives, and liberties, and in the enjoyment of a reasonable amount of local political freedom. Especially ought those hereditary chieftains who are humane and just in their rule to be given a limited amount of authority over their tribes in conformity with the general suzerainty of the white government. The employment of native labor ought to be hedged about with suitable regulations, so as to prevent the abuse of the employees or the unfair disposition of the question of wages. The negro is disposed by nature to look upon the white as his superior, and it is only when he fails to act as such that the white loses that position of influence. Sir Harry Johnston has truly said that the first requisite in dealing with the African is to be a gentleman. The savage is quick to make distinctions, and the white man will do well to note the fact. With such guiding principles in the great task that lies before him in the land of romance and story, the ever-victorious Caucasian can look forward with the most pleasant anticipations to the development of Africa.

S. P. VERNER.