be noticed in it, then it broke up lengthwise and crosswise, moving at the same time still nearer the zenith. A few moments later short parallel streamers began to shoot out from it at right angles and in a northerly direction giving the appearance of the prongs of a crown. Thereafter the long gray bow gradually vanished and in its place appeared irregular small grayish cloud-like masses moving swiftly to and fro across the zenith while short streamers continued to dart upward from the northern horizon.

DAVID RIESMAN

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SCIENTIFIC BOOKS

South America. By NELLIE B. ALLEN. New York, Ginn and Company, no date (1918?). Illustrated. 12mo. Pp. xv + 413.

This book seems to be one of a series of "geographical and industrial studies." The author is connected with the state normal school at Fitchburg, Mass., and the book is intended for use of "the children in our schools."

It is a book of good intentions written down to young people; and as young people are in the habit of accepting as the truth all the statements they find in print we feel at liberty to ask whether the children are being properly served. It contains a great deal of the stock information to be found in books of travel, circulars, reports and papers about South America, and mixed in with it are many things that might better have been omitted.

One of the most striking things about it is the air of artificiality and false enthusiasm that the author seems to think it necessary to maintain. It is difficult to keep up such high pressure activities, and, at the same time, to verify statements and to discriminate between trustworthy and untrustworthy authorities. The result is a demoralizing tendency towards exaggeration and sensation. For example, a pile of wheat twenty-five or thirty feet high is called a "mountain of wheat" (pp. 172–3); wheat fields are "a sea of wheat" (p. 171); trains "shoot in and out of tunnels" (p. 127); "cold storage plants are bursting with tons of beef" (p. 162), and maté "becomes as solid as a rock" (p. 197).

Allowances may be made for such evident exaggerations, but unfortunately there are interspersed among them a long list of misleading half-truths, of which the following are examples: Bahia "is guarded by strong forts" (p. 86); "both men and women in Brazil smoke" (p. 86); maté "enables people to do their work and endure hardships without fatigue" (p. 195); "bread (is) made from manioc flour" (p. 201); "Brazil is larger than the United States" (p. 78), and the carriage drive over the crest of the Andes is a "dangerous trip" (p. 225).

Certain other statements are even less than half-truths: speaking of the Amazon region, she says the "forest is always . . . brilliant with flowers" (p. 106); as a matter of fact it is rarely brilliant with flowers. The sandstone reefs of Pernambuco and the coast are called "the great coral reef," and the "coral seawall" (pp. 82–83). It is said that petroleum has been discovered in Brazil (p. 89) (it has not); that "rich beds of . . . platinum are known to exist" in Brazil (p. 89) (they are not); and, among other things, "*pearls . . . are mined in various parts of the country*" (p. 89)!

A writer who makes such haphazard statements can hardly be expected to discriminate in regard to information of any kind. Thus we are told that Paraná means "in the Indian language, 'mother of the sea'" (p. 145); Dr. Theodoro Sampaio, an authority on the Tupi, says it means "like the sea" or "as big as the sea." At page 103 it is said that the wet season in the Amazon valley is from November to February; Carvalho's "Météorologie du Brésil," pp. 205 and 216, says it is January to May at Pará, December to June at Obidos, and January to May on the Negro.

The palm nuts used to smoke rubber in the Amazon region are spoken of as "the fuel he (the rubber cutter) likes best" (p. 119). It is not a matter of what he likes, but a demand of trade. From the beginning of the rubber industry to the present the rubber gatherers of the Amazon region have considered it nec-

essary to use for rubber smoking the nuts of the Urucury palm, botanically known at *Attalea excelsa*.[1]

Of Rio de Janeiro it is said that a person who visited that city twenty-five years ago would hardly recognize the city to-day, and that "the traveler who was so unfortunate as to be obliged to stop there held to his nose a handkerchief saturated with disinfectant as he made his way through narrow, dirty, undrained streets" (p. 93). Such statements may make an effective background for references to the present healthfulness of that city, nevertheless, they are gross exaggerations. The statement (p. 93) that the people of Rio "learned from the United States how to make the city a pleasant healthful place to live in" is misleading to say the least. The fact that malaria was transmitted by mosquitoes was discovered by a surgeon in the British army. And as for Rio's beautiful Beiramar, we regret to say that there is no such a water front drive in the whole United States from which it could have been copied.

Both maps and text keep up the ancient myth about the forests of the Amazon valley being called *selvas* (pp. 105, 125). As a matter of fact they are called *mattas* by the people, and the forest map of Brazil by Dr. Gonzaga de Campos calls them *mattas*. But why must a foreign word be used at all? They are simply tropical forests.

But errors of statement that may be matters of oversight are of less importance than the attitude of teachers who think it necessary to use extravagant language in order to awaken the interest and to hold the attention of pupils. At page 123 we are informed that Indians have gathered the rubber, the sailors have manned the ships, and the workmen in the factories "have spent their time *in order that you may be protected from the wet.*" There is not a workman in that list who doesn't know better. And when attention flags, something more startling than usual must be injected into it. "Did you hear that loud report? Look at the column of smoke rising in the field over to the right" (p. 267). It turns out to be nothing more serious than the workmen blasting out the rocks in the nitrate fields. And though the nitrate regions of Chile are in low hills along the western margin of a flat ancient lake bed she says the "surface of the country is all upheaved" (p. 266), and gives a picture of waste rock from the quarries as evidence of the upheaval. Fictitious resemblances between the United States and Brazil are discovered (p. 78); while "Lying in its wide mouth, as the prey might lie in the open jaws of a great serpent, is the island of Marajo" (p. 104).

Some of this writing down to students is harmless enough, but one wonders why it is necessary to use a platitude instead of plain English; for example, coffee is called "our morning cup," and she "explores" the streets of Buenos Aires (p. 164). All of which is in keeping with certain other hackneyed expressions, such as: Bahia bay is "large enough to hold all the navies of the world" (p. 86); "every part of the animal, except the bleat and the bellow, is made use of" by the meat packers (p. 181). The pity of it all is that when the author forgets these antics and sticks to facts and to plain English she is an interesting writer, a fact which leads one to conclude that it is the system that is at fault rather than the author of the book.

There are legitimate ways to hold the attention of students, and there is a reasonable mean between buffoonery and the dry-as-dust way of presenting instruction. The idea that studies must be made entertaining has so penetrated our schools, our teachers, and our text-books, that the seriousness of education is well nigh lost sight of in the sensationalism, extravagance, and unwholesome lack of sincerity that naturally springs from such false conceptions.

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[1] Wallace's "Palm Trees of the Amazon," p. 118.

PATENT REFORM PROSPECTS

THE following letter is published for the information and suggestions it contains: