



The DOOM TRAIL

by ARTHUR D. HOWDEN SMITH
AUTHOR of PORTO BELLO GOLD ETC.

W.N.U. SERVICE COPYRIGHT BY BRENTANS

CHAPTER XVIII—Continued

And, standing with legs spread apart in the middle of the paved sidewalk, he read:

"And seeing that the resentment of the Six Nations is so deeply stirred by reason of the tabling of the law, we are resolved that the provincial government shall have authority to impose the duties upon trade goods for Canada as before. And his excellency the governor shall be required to file a complete report of the situation with such addenda, facts and statistics relative to amounts and totals of trade and fluctuations therein in the recent past as may be helpful to their lordships in reaching a final decision in this matter.

"There is more of the same tone as that I read. But I am selfishly occupied with my own interests, Ormerod. Here is a matter which more nearly concerns yourself."

He produced a large rolled sheet of parchment, imposingly encircled, across the top of which ran the legend:

"A FREE PARDON."

"'Twas bound to come," he rambled on. "Do you go within and show it to Mistress Ormerod."

But Marjory had been listening at the window, and as I opened the door she fell into my arms and clung there, sobbing for the relief that came to



both of us with the lifting of the menace which had overhung my life so long.

"I am so happy I know not what to do," protested Marjory, wiping her eyes. "But, oh, see who comes!"

We followed her pointing finger; and there, striding between the ordered house-fronts of Pearl Street, exactly as I had seen him the first time we met, came Ta-wan-ne-ars, the eagle's feather slanting from his scalplock, the wolf's head of his clan insignia painted on his naked chest. His grave face was smiling. His right arm was raised in salute.

"Qua, Ga-en-gwa-ra-go! Qua, friends! Ta-wan-ne-ars greets you."

"Have you any further news?" questioned the governor, alert as always for tidings of his distant dominions.

"Only news of peace. The frontier is quiet. The Doom Trail is closed. The far tribes are traveling to Albany to offer their allegiance and friendship. The fur trade is once more under control of the English and the Long House."

"We have waited long for you to visit us, brother," I said. "Now that you have come we shall make you stay many moons."

His smile became sad. "It cannot be, Ta-wan-ne-ars comes to say good-by."

"Good-by?"

"Yes, brother. Have you forgotten the search for my Lost Soul?"

"But she is dead!"

"She is with Ata-ent-sic. Ta-wan-ne-ars seeks his Lost Soul. He has no fear. He will go through Da-ye-da-go-war, the Great Home of the Winds, where Ga-eh, the Wind Spirit, dwells. He will go through Ha-nis-ka-n-no-geh, the Dwelling Place of the Evil-Minded. He will go to the world's end if the Great Spirit will but guide his footsteps."

"He would not step indoors for food, but insisted on walking back toward the Broad-Way with Master Burnet and me. At the Bowling Green we encountered Peter Corlaer."

"Ha, Peter," the governor halted him. "Well met, indeed. What hath earned us this honor?"

"I heard Ta-wan-ne-ars was here," he panted. "I followed him down river from Fort Orange."

"What does Corlaer wish?" asked Ta-wan-ne-ars.

The big Dutchman stammered and gurgled with embarrassment.

"I go with you," he gasped after much effort.

"I go to the Land of Lost Souls."

"Ja, that's all right," returned Corlaer. "I go with you."

The hard lines of the Seneca's stern face were softened by a rare glow of feeling.

"Ta-wan-ne-ars never doubted Corlaer, Ga-en-gwa-ra-go," he answered, squeezing Peter's hand in his. "He would not ask any to go with him because the peril is great. But he will be glad to have Peter by his side. We will take the first boat which leaves."

"One is sailing from der Whale's Head wharf," suggested Peter.

"Good. Then we will say good-by here."

"No, no, we will accompany you to the wharf," said the governor. "Where are you from, Peter?"

"I was in der Shawnees' country when I heard Ta-wan-ne-ars was going upon a long journey alone. So I go to De-o-nun-da-ga-a, and from there to Fort Orange and here."

"Have you heard aught of Murray?"

"Nien, Murray is nefer spoken of. Der French would hafe none of him. They said he sailed from Quebec for der Hafana."

"So are the mighty fallen," mused the governor as we strolled along. "A few short months ago he was more powerful than I in the province. Today he is nobody."

We walked out upon the wharf where the sloop River Queen lay with her moorings slack.

"Tumble aboard, my masters," shouted the captain. "There's a fair breeze and the tide is flowing."

"Good-by," said Ta-wan-ne-ars. "Ga-en-gwa-ra-go and O-ti-and will be always in the thoughts of Ta-wan-ne-ars."

"Good-by," mumbled Corlaer.

"Good-by for a while," retorted the governor. "We shall be ready to welcome you with rejoicing when you return with a brave tale to tell us."

"Good-by," I called, and my voice choked.

I raised my right arm in the Iroquois gesture of greeting and farewell. Ta-wan-ne-ars answered in kind, motionless as a bronze statue against the dirty gray expanse of the sail. The sloop dropped her moorings and glided out into the current.

In ten minutes Peter's face was a broad white blotch at the foot of the mast and Ta-wan-ne-ars was a darker blur beside him. They sailed on into the eye of the setting sun.

"'Tis the very spirit of this land, Ormerod," observed Master Burnet as we watched. "Having finished one adventure, they seek a fresh trial of their resource and daring. Ah, well, 'tis for you and me to take their precept and strive to sharpen our wits upon some homely adventures of our own. All of us may not seek the Land of Lost Souls, but each of us may find a worth-while task upon his doorstep."

[THE END.]

Value of Milk Known From Earliest Times

Cows were the first animals domesticated when cavemen forsook their clubs for rude plows to till the soil. In India the cow has been worshipped for centuries. Sacred cows have been maintained in temples and milk has had an important place in Hindu magic. Milk has been the subject of song and poetry since history began.

Canaan, the promised land of Israel, was said to flow with milk and honey. Ovid, the Roman poet, gave milk second place only to nectar, the drink of the gods.

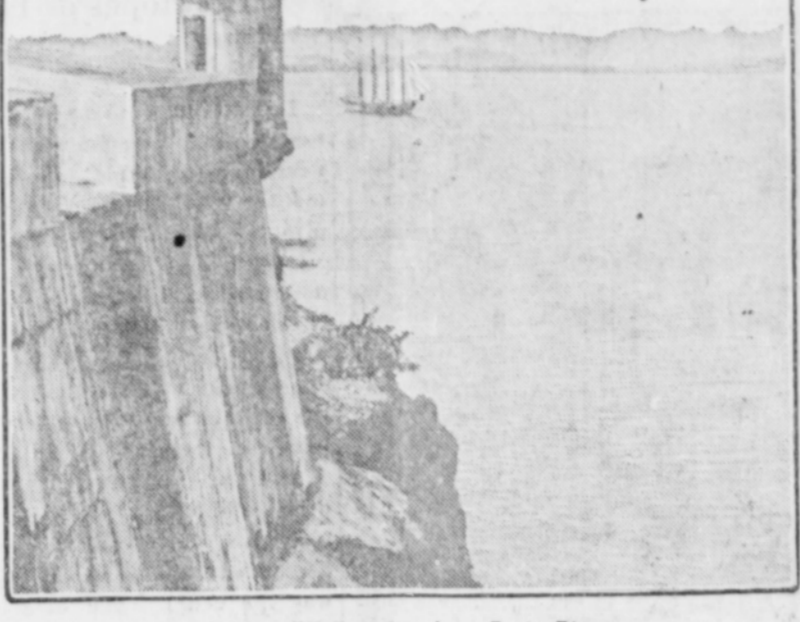
Milk for ages has been regarded as a cure for human ills. The ancients discovered it was a tremendous factor in building up and maintaining the body. This is because milk is an almost perfect food, combining nearly all the elements necessary for complete nourishment.

Modern science has produced evaporated milk which, experts say, is an improvement on the original. By removal of 99 per cent of the water, evaporated milk is rendered twice as rich in food value as ordinary market milk. The sterilizing process through which evaporated milk goes makes it easier of digestion than ordinary bottled milk. This is due to the fact that the milk curds are rendered more flocculent by the heat.

In Little Old New York

A Broadway trolley conductor had listened to a loud tirade against his refusal to stop at an odd-numbered street and was silent until the irate lady was well off his car at Fifty-second street, still scolding. Then he turned to the inside of the car, made a bow and called out clearly: "Ladies and gentlemen, I have the honor to announce that the next stop will be at Fifth street."—The New Yorker.

Spain in America



Fortress Wall at San Juan, Porto Rico.

(Prepared by the National Geographic Society, Washington, D. C.)

HERE is a large Spanish-speaking world today, comparable in a way to the English-speaking world. But unlike the latter the Spanish-speaking region is not to a considerable extent under the wing of a mother country, but is instead divided among more than a score of independent nations.

The great empire of Spain—the most extensive that up to that time had existed—was based chiefly on a papal bull. Soon after Columbus sailed west to America and Vasco da Gama sailed east into the Indian ocean, the bull was issued dividing the world approximately south of the Pillars of Hercules into two realms, and giving Portugal a monopoly of exploration to the East and Spain a monopoly to the West. The dividing line was fixed 37 degrees "west and south" of the Azores and Cape Verde islands, so that it ran just east of the West Indies and roughly cut Brazil from the South American continent. All the rest of the new world was left vaguely to Spain. Spanish explorers and adventurers poured westward on the heels of Columbus, and had soon staked out for Spain all of the West Indies, most of South America, and large areas in the southern part of North America.

The first settlement was established at the end of the fifteenth century in Hispaniola, the present island of Santo Domingo. Then in the first decade of the sixteenth-century settlements were started or attempted in rapid succession in Jamaica, Porto Rico and Cuba. Such widely separated regions as the Isthmus of Panama, Florida, and the coast of Argentina were reached in 1513. In the same year Balboa crossed the Isthmus, waded into the Pacific and made that classically sweeping claim in the name of the king of Spain. To that sovereign, he proclaimed, belonged, as a result of his wading party, the entire ocean and all land which its waters touched.

Swift Growth of the Empire.

In 1519 Magellan (though a Portuguese) was sent out by Spain to traverse the newly discovered ocean. Finally he reached the Philippines, which by strict interpretation lay within Portugal's "mandate." However, with the comforting philosophy that east was west if you arrived there by sailing westward, Spain claimed this large group of islands and 35 years later established settlements there. This became the only considerable part of the Spanish colonial world outside the Americas.

In the meantime Spanish power was growing rapidly in the new world. The conquest of Mexico began in 1519. Panama City was founded the same year and became a starting point for expeditions north and south along the shores of the Pacific. Peru was invaded in 1532 and Chile came at least partly under control soon after. The California coast was explored in 1542 and land expeditions went about the same time into regions that are now New Mexico, Texas, Arizona and even Colorado. Settlements had previously been established in Venezuela and Colombia on the Caribbean coast of South America.

By 1580 the Spanish possessions were at their greatest. In Europe they included in addition to Spain itself, the Low Countries, Naples, Milan, Sicily and Sardinia and the Canary Islands; in the new world, the West Indies, most of South America, all of Central America, and the southern part of North America, even including large areas now in the United States; in Africa, small settlements on the north coast; and in the East, the Philippines and sundry small islands of the Pacific.

Over much of this Spanish empire at its greatest Spain had only tenuous control or sheer military dominion, and when the empire broke down such regions passed on but little colored by Spanish culture. This was true of the Italian possessions and those of the Low Countries. The deepest impression was made by Spain on her new world territories. There were introduced the Spanish language, religion, architecture, laws, and customs; and in most of the area where Spain actually consolidated her control those factors remain today as Spanish as in the mother country.

Today there exist between 90,000,000 and 100,000,000 people whose native language is Spanish. The Spanish-speaking world, therefore, has roughly half as many members as the English-speaking world. The area of this cultural remainder of the Spanish empire is roughly 5,000,000 square miles. The region still in allegiance to the Spanish language thus covers about one-eleventh of the land area of the earth and embraces about one-twentieth of the earth's population.

Many Millions Speak Spanish.

In setting out to explore this Spanish world, the logical starting point is Spain itself, the fountainhead of the influences which deeply affected a large slice of the earth; and equally logically the direction of the journey is west. On the west coast of Africa two patches of territory are encountered where the Spanish flag as well as Spanish influences rest. Off shore are the Canary Islands. There the Spanish flag is left behind.

The next bit of the Spanish world encountered lies in the new world. It is Uruguay, smallest republic of South America, where the children of Spain are carrying on the culture of the mother country. Beyond, eight other countries—all those of South America save Portuguese Brazil and British, French, and Dutch Guiana—fall, too, under the banner of Spanish culture.

In the West Indies there have been defections. Trinidad and the Leeward and Windward Islands, although once all claimed by Spain, have lost or never felt Spanish culture. Over Porto Rico the flag of the United States flies; but it is still a part of the Spanish world. Spain is dominant in blood, traditions and language. In old Hispaniola, where the Spanish seed was first planted in the new world, the eastern half of the island still shows strongly the Spanish impress. This is the Dominican republic where language and law are still Spanish. But in the western half of the island, covered by the Republic of Haiti, Spanish culture succumbed to that of France and Africa.

Jamaica, once a stronghold of Spain, has long been dominated by British culture; and the Bahamas, claimed by Spain, have known only British influences. Cuba has been independent of Spanish political power since 1898, but is still culturally a part of Spain—the most Spanish of West Indian islands.

Cultural Influences.

Through the Isthmus of Panama, Central America and Mexico, Spanish cultural influences sweep unbroken as they have for the past three centuries and more. Florida shows little effect of her former Spanish ownership save in a few architectural touches and a few geographic names. Texas, too, was lost to Spain, but the effects there are greater; and in many a community near the Rio Grande the Spanish language is almost as necessary as the English. In Arizona and California, once under Spanish influences, the situation is much like that in Texas.

But one American state stands on a different footing. New Mexico has barely passed the point at which its English-speaking influences weigh more heavily than its Spanish factors. Only a few years ago it could have been listed as a part of the Spanish world. Then its legislature was conducted in Spanish or in the two tongues; and Spanish was the current language on street and range and farm. As it is the beam has tipped only a little; the interpreter is still an important person in the courts, and it is easy enough to find communities in the state in which if one speaks no Spanish he can make himself understood only through some school child. These youngsters are being taught English now in the public schools and in a few generations will no doubt turn the scale overwhelmingly to English speech.

Continuing westward one finds no further traces of Spain's world-wide empire until he reaches the Philippines. There, in spite of the mixture of blood, Spanish culture took firm hold, at least in the non-Mohammedan country. Spanish customs, laws and architecture will no doubt color life in the Philippines for many years to come.

POULTRY DAIRY

FEEDING TRIALS FOR THE CHICKS

Feeding trials during 1926 on the experiment station poultry farm at Rutgers university have shown that by means of a new ration it is possible to make White Leghorns average 1 1/4 pounds in weight when eight weeks old and show steady gains to a maturing weight of four pounds.

The new ration used was designed to meet all nutritive requirements of birds raised in confinement for the prevention of coccidiosis, black head, round worms and tapeworms, and consisted of the following ingredients: Twenty pounds of wheat bran, 20 of Red Dog flour, 20 of yellow corn meal (whole ground corn), 20 of ground rolled oats, 10 of meat scrap (50%), 5 of dried milk, 2 of oyster shell meal, 1 of salt and 1 quart of cod liver oil. The scratch ration consisted of 2 parts of fine cracked corn and 1 part of fine cracked wheat.

For the poultrymen who wish to use this ration the poultry department gives the following directions:

For First Three Days—Give milk to drink, either sour skim milk or a commercial condensed skim milk or buttermilk. These two commercial products must be diluted one part in seven parts of water. It is preferable to continue feeding the milk indefinitely, thus promoting best possible growth.

Three Days to One Week—Feed mash in pans twice daily, all the chicks will eat in 20 minutes; scratch feed 3 times daily, all they will eat in 20 minutes.

One Week to Twenty Weeks—Furnish plenty of mash hopper space, add fresh mash daily. Give scratch feed three times daily. Green feed must be tender and succulent; feed small amounts at start, then increase to what the chicks will eat in 15 minutes. Infertile eggs from the incubator, boiled, make a splendid delicacy for the chicks.

When birds are in confinement, allow 900 chicks to a brooder pen, 10 by 12 feet in size.

When the birds are given free range allow 350 to 400 chicks to the flock. Remove all males four to five weeks of age. Furnish perching space early to prevent crowding.

Fresh Air and Light Are Best for Growing Chicks

Plenty of fresh air and light are necessary to get the best results with growing chicks. In addition to ventilators in the back of the house, both at the plate and at the floor line, the windows should be adjustable. When the weather permits, the lower sash may be removed in order to admit more direct sunlight. In a 10 by 12 brooder house it is desirable to have at least four 4-light sashes made of 12 by 14 panes.

Brooder house temperatures should be kept as uniform as possible and to this end the walls and floors must be tight. Drop siding for walls should be put on dry. If it is put on wet it may dry out, crack and open up. Double wall construction has not always proved satisfactory because it is hard to keep such houses free of mites.

Feed Costs of Growing Pekin Ducks for Market

The feed cost of growing Pekin ducks to ten weeks of age, when they weigh from five to six pounds, is estimated at from 13 to 15 cents a pound. Green ducks are marketed from April to November, and bring from 20 to 45 cents a pound when sold to commission men at wholesale. The highest prices are paid for ducks marketed early in the spring, decreasing as the season advances and the supply becomes more abundant. The demand for green ducks has been built up in large cities in the East and on the Pacific coast, and there is very little demand for such ducks in small cities and towns. Many farmers market their ducks in the fall as spring ducks at a lower price per bird than is received for green ducks in the spring.

Turkey Eggs in Incubator

Turkey eggs are successfully hatched in any incubator which will do effective hatching of chicken eggs. The incubator is being used more and more for this purpose each year and some of the largest turkey producers hatch exclusively with the incubator and raise the turkeys with artificial brooders. The young turkeys must be kept clean and dry, especially during the first four weeks. Turkeys do not require quite as much heat as chickens.

Feather-Eating Hens

Feather eating is a habit that seems to occur most often when the hens are overcrowded, idle, and hungry for something which seems to be lacking in the ration. The best remedy is to turn the hens on range where they will separate and become interested in scratching for a living.

Feed a balanced dry mash containing meat scrap and this may reduce the feather pulling. Hang a piece of raw beef in the house for the hens to peck at.

COTTONSEED MEAL GOOD DAIRY FEED

When a ton of cotton seed is exchanged for a ton of prime cottonseed meal and the meal converted into butterfat by feeding to dairy cattle, the feeding value of the meal is obtained free of charge.

"This may seem like a far-fetched statement at first glimpse," says John A. Arey, dairy extension specialist at the North Carolina State college, "but it's true, certainly, if the manure is handled properly. A ton of prime cottonseed meal has a fertilizing value of about \$28. Only about one-fourth of this is lost when passing through the cow. The remaining three-fourths of the fertilizing material, with a value of \$21, remains on the farm for soil enrichment. This amount is only \$1 less than the original market value of the ton of cotton seed which was exchanged for the meal."

Mr. Arey states that as a source of cheap protein, the cottonseed meal leads all other feeds. The protein is furnished at three cents per unit when meal is secured at the exchange price of cotton seed. The seed are selling now for about \$22 per ton. When protein is obtained from soy-bean meal, it will cost 4.8 cents per unit, as good soy-bean meal is selling for about \$47 per ton. When the protein is obtained from wheat bran at \$38 per ton, it will cost 12 cents per unit.

The cost of the total digestible nutrients in cottonseed meal is the lowest of all feeds, with corn next.

This shows, states Mr. Arey, that cottonseed meal is not only an economical feed but that it also contains large amounts of valuable fertilizing material which are obtained at a low cost when the meal is fed through cows. Yet, in spite of all this, thousands of tons of this, our most valuable feed, is being shipped to other states annually for cattle feeding and is enriching their soils at the expense of ours.

Good Winter Feeding of Dairy Cattle Pays Best

Underfeeding live stock, especially the dairy cow, is one of the most common mistakes made by Oklahoma farmers, A. D. Burke, dairy specialist of the Oklahoma A. and M. college, declares. In cold weather a cow, more than at any other time, needs a full supply of good feed, properly balanced, if she is to stay in condition and produce milk. It pays to take good care of the dairy cow in the winter, however, for many comparisons of summer and winter dairying show that the winter work makes the most profit.

Cows that freshen in the fall produce more milk and also more butterfat when the price is highest. However, cows cannot produce unless they are getting the proper feed and are being kept under good conditions. Burke quotes a list of the most common mistakes made in feeding dairy cattle. They run as follows:

1. Poor combination of feeds.
2. Underfeeding.
3. Insufficient protein.
4. Lack of water.
5. Lack of legume hay.
6. Sudden changes in feeding.
7. Poor housing.
8. Parasites and pests.
9. Insufficient salt.
10. Waste of feed.
11. Poor equipment.
12. Overfeeding.

Buying Cull Dairy Cows Very Risky Proposition

Because there is a demand for good dairy cows, many culls are being sold to unsuspecting men. This situation has become so serious in Indiana that E. A. Gannon of the dairy extension department at Purdue warns all buyers to be on their guard, and advises them to buy their cows from clean, local herds when possible.

A recent investigation in Indiana showed that of several carloads sold only about two cows out of every twenty-six could be recommended as profitable producers. Out of one carload of heifers fifteen aborted and were eventually slaughtered. Many clean herds were thus infected with contagious abortion which will retard their progress for years. One man bought four cows brought in by a dealer. Three proved unprofitable and the fourth was slaughtered because of udder trouble. Most of the cows brought in are reported as underfed, in poor condition, and lacking in dairy type, constitution and breeding.

Organized effort among farm leaders resulted in an educational campaign in the local papers, and by any other means available. Bankers refused to assist in financing such sales of cattle. Much benefit has resulted from the campaign.

Deficiency in Minerals

When the milk-secreting organs of the cow are stimulated through liberal feeding to produce a given quantity of milk the cow responds, and not being able to produce milk with less mineral matter than a certain normal minimum, there is only one thing for her to do—and that is to draw upon the mineral matter in her own bones and put that into her milk. That is exactly what she does and the greater the capacity to produce milk, the more she draws upon her own bones.