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From the folklore of the Arabs: Lugman bin 'Ad, an ancient Polonius who lived a long time, thought a great deal, and left the fruits of his wisdom to posterity.



NURSING IN THE ARAB EAST 14 THE BEY FROM VIRGINIA 24



W MICHAEL ELIN JANSEN The pay is low, the hours long and the challenge enormous: better health for the diverse peoples in the villages, the cities, the deserts and the moun-

tains of the Arab world.



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In Amman, Jordan, at a rehabilitation center supported by the Save the Children Fund, a male nurse works with a young patient who has lost a foot. Story on page 14.



To improve agricul-

tural output, contractors poured some five million cubic feet of concrete to complete this dam, near Jaizan, in southeastern Saudi Arabia.

DIARY OF A DIG 10







In the rubble that was Fustat, once a capital of Islam, a midwestern housewife plunges into the arcane techniques of archeological exploration and learns an empire's history.

GHOST SHIPS IN THE GULF 26



He began as a sailor for the Confederacy. became a soldier of fortune in Latin America, and ended as an explorer and administrator in the court of the Khedive Ismael.





To this day Arab dhows sail the blue waters of the East, weather-beaten, handcrafted ahosts from another age, carrying the products of this one



Cover: At the Jordan School of Nursing in Amman, as at similar schools throughout the Middle East, proud student nurses receive their hard-won caps at traditional ceremonies. Photograph by Peter Keen. Story on page 14. Rear cover: An Arab dhow, ghost ship from another

The wisdom and savings of Lugman bin 'Ad



ne of the more curious characters in the folklore of the Arabs is Luqman bin 'Ad, a member of that mysterious tribe descended from giants that once roamed southern Arabia and built the great dam of Marib. Luqman is mentioned in the Koran as "one to whom Allah brought wisdom." Then, as now, wise men were a rare commodity and medieval commentators and historians worked hard at finding out all they could about the enigmatic Lugman bin 'Ad. Opinion was sharply divided between those who thought that he was a prophet and those that maintained that he was an Abyssinian serf whom Allah rewarded for his faith by giving him wisdom and a long life in which to accumulate more.

So many wise saws were ascribed to Lugman that Wahb bin Munabbih, who fathered a great many traditions of his own, claimed that he personally had read a book of wisdom of Luqman containing more than ten thousand chapters. Lugman apparently lived long enough to accumulate that much wisdom. According to tradition, he lived as long as seven vultures, which means, since the average vulture has a lifespan of 80 years, that Lugman achieved the considerable age of 560. Lugman named his last vulture "Lubad," an old word meaning eternity, and installed him in comfort on top of a jebel. Lugman lived at the bottom. When he calculated that his time was up, he climbed to the top of the jebel, and he and Lubad died at the same instant.

To the very end Lugman's powers were undiminished. Someone asked one of his servant girls how Luqman's eyesight was now that he was so old. "Not so good," replied the girl. "The other day he was watching a couple of ants on the ceiling tracks of the female and the male."

Before his death, Luqman passed on his wisdom to his son in the form of a last will and testament. Various versions of this survive. In all of them the wisdom, like all of the so-called wisdom of the East, is eminently practical. Way in advance of Watergate, for example, Luqman offered some advice to a ruler's aides. "If you should hear something at the door of the ruler's chamber, forget it. Don't tell it to either your friends or your enemies, lest it get back to you and you get burnt!" "Don't repeat everything you hear and don't talk about everything you see." "Don't reveal state secrets and don't classify things that are common knowledge." (sic!)

But he did not restrict himself to politics. Among his sayings, was advice about: women ("Watch out for pretty women who wear heavy makeup-they will end up spending everything you have."), loudmouths ("Talk in a low voice; if loud voices could get things done, asses would be building houses every day."); class differences ("Remember that when people see a rich man eating a snake, they say it is for medicinal reasons; when they see a poor man doing the same, they say it is because he is hungry."); losers ("It is better to be beaten by a wise man than praised by a fool."); loquacity ("It is better to stumble

with your feet than to stumble with your tongue."); poverty ("It is better to be dead than poor."); planning ("A bird in the hand is better than a thousand flying about the sky."); reputations ("Remember a good reputation is better than physical beauty, for a good reputation lasts, but beauty passes."); and urban violence ("Don't walk the streets after sundown without a good sword.")

n ot all of Luqman's advice to his son is contained in his testament. Sayings of Luqman are scattered through the works of Arab writers of all ages. Sometimes they are classified according to subject matter. We have, for instance, a set of admonitions to Luqman's son before he set off on a journey.

Luqman's son, whose name was either Mathan, Nathan, Baran or Tharan, depending on whose authority you are willing to accept, must have been most heartily sick of all this well-intentioned advice. And in any case he ignored it. It is historically and he could barely distinguish between the attested to that after his father's death he gave wild parties, chased pretty girls with heavy makeup and was bankrupt within a vear

> One of Luqman's chief interests was tourism, on which subject he had an endless fund of advice: "When you travel, don't fall asleep on your camel, or you'll irritate its back. When you make camp where there is plenty of pasturage, feed and water your camel before yourself. If you are a long way from any habitation when night falls, don't make camp in the middle of the trail or you'll have trouble with snakes and wild animals. Choose the best campsite you can, with plenty of fodder and a soft place to sleep. Greet your campsite when you arrive and bid it goodby when you leave, for every





spot on the face of the earth has its own guardian angels. Don't raise your voice in raucous song as you ride along. Make sure you have your sword and bow and all your weapons, as well as a pair of sandals and a turban. Be sure to take along a needle and thread and a medicine chest in case you or one of your companions should fall ill. Be good company to your traveling companions and share your provisions generously. If they speak to you, answer back. If they ask for help, give it. Listen to those who are older than you. If you get lost, dismount and make camp. Only believe what you see with your own eyes."

Lugman, ever practical, also had oldfashioned ideas about child discipline. One of his most famous sayings is: "A father's blows upon his son's back are like manure upon a field." With a son like Mathan, Nathan, Baran, or Tharan, or whatever his name was, such sentiments are not surprising.

Most of Lugman's advice is about real people in a real world. There are few high moral sentiments contained in any of the above examples. The kind of wisdom that has always been appreciated in the East is the kind that enables a man to survive in a hostile world. Further examples can be adduced. For instance: "I have often regretted things I've said, but I've never regretted keeping my mouth shut." Or: "Eat the best food and sleep on a firm mattress."

One interesting and revealing anecdote is related by the great historian at-Tabari. One day while Lugman was sitting at a soirée talking with important people a man came, up to him and said:

"Aren't you the guy that used to herd sheep with me?"

"Yes," replied Lugman. "Well how in the world did you end up here, hobnobbing with professors?"

answered Luqman.

Perhaps the most famous story told about Lugman is this one. Lugman, while he was still a serf, was summoned by his master and ordered to slaughter a sheep. He did so, and his master said, "Now give me the best part of it." So Lugman removed the tongue and the heart and prepared them for his master's supper. The next evening he was again summoned by his master and ordered to slaughter a sheep. He did so, and his master commanded, "Now give me the worst parts." Again Lugman prepared the heart and tongue of the sheep for his master's supper. His master grew angry and said, "When I ordered you to prepare the best parts of the sheep for me, you gave me the tongue and heart, and now when I order you to give me the worst parts of the sheep you again serve me the tongue and hear!" Lugman responded: "There is nothing better than them when they are 4good, and nothing worse when they are bad."

f this last story sounds familiar, it should. The same story is told about Aesop by the Greeks. Both Aesop and Luqman are described as having originally been Abyssinian and ugly. The story about Luqman and the seven vultures seems to be purely Arab, but both Aesop and Lugman are credited with having composed animal fables. In Arabic literature, 49 animal fables are attributed to Lugman, all but two identical to fables in the collection of Aesop. It is obvious that either the Greek fables are translations from the Arabic or that the



"By telling the truth and keeping quiet about things that don't concern me,"



Arabic fables are translations from the Greek.

The latter alternative is the more likely, as the Aesopian fables are older than their Arabic counterparts, but it is perfectly possible that the animal fable was originally an oriental literary genre and that both Aesop and Luqman adapted it from the same Babylonian source. It says much for the basic identity of Classical and Islamic culture that the story of the tortoise and the hare, the wily fox, the proud but rather stupid lion are equally at home in Greek and Arabic. No matter how far Eastern and Western cultures have subsequently diverged they both have their roots in a common East-Mediterranean culture of great antiquity.

In fact, the Greeks' Life of Aesop, a late work by the Byzantine litterateur Planudes, is in reality a version of the Arabic, and earlier the Aramaic, Life of Ahigar. Ahiqar had a son, who in Arabic is called either Mathan, Nathan, Baran, or Tharan, who paid no attention to the wise adages of his father, and as a consequence, after holding wild parties in his father's house, chasing the serving girls (presumably wearing heavy makeup) and ultimately selling state secrets to the Pharaoh, was ordered flayed. This punishment took place to the accompaniment of sage counsel couched in the form of animal fables and some of these fables later turn up in the collections attributed to Luqman and Aesop. Even at the end, the son of Luqman, or Aesop, or Ahiqar, had to put up with wellmeant admonitions. They were probably harder to bear than the flaying.

Paul Lunde, a student of Arab literature, freelances from Rome.





n a land as arid as Saudi Arabia construction of a dam may sound not in Jaizan.

Jaizan is a green plain down by the southeastern edge of the Red Sea. Unlike the rest of the kingdom it receives heavy seasonal rainfalls, most of which, until three years ago, ran off uselessly into the sands.

In the winter of 1971, however, top officials from Saudi Arabian ministries gathered in Jaizan to mark the completion of the Wadi Jaizan project-a project intended to harness that precious, previously wasted rainfall and channel it into the irrigation needed for a significant increase in the areas' agricultural output.

The dam had been planned ever since the United Nations Food and Agriculture Organization conducted a preliminary study and concluded that a dam in the area might be of value. Acting on that conclusion, officials in the Saudi Arab Government brought in Ital-Consult, a major Italian engineering firm, and requested detailed feasibility studies.

After studying the area thoroughly, Ital-Consult zeroed in on a site tucked between mountain ridges about 30 miles east of the city of Jaizan at an elevation some 450 feet above sea level. That done, the firm went ahead

with a design. When the design was finished the government accepted a like a superfluous undertaking. But bid from Hochtief, a German firm, and in 1967 work was begun.

> For Hochtief, the first step was to provide a solid foundation. To do so the firm's engineers ordered drills into action and excavated nearly 4,350,000 cubic feet of earth and rock. Another 4,233,000 cubic feet of rock were blasted, crushed — and then washed-to provide raw material for the 5,121,400 cubic feet of concrete that went into the body of the dam.

> Work went slowly at first, but eventually the dam began to take shape. When it was finished it measured 1,036 feet across the top, was nearly 13 stories high and had a base 131 feet thick.

> Behind the dam was a new reservoir, then still dry, with a capacity of 2,507,000,000 cubic feet or nearly 19 billion gallons. Poured carefully through gates in two spillways at the base of the dam, some 1,800,000,000 cubic feet of water-close to 131 billions gallons-can provide irrigation for more than 3,000 acres of land. In comparison with other dams in

the Middle East the Jaizan Dam is hardly a monumental project. In Egypt the overwhelmingly bigger Aswan High Dam is 364 feet high,



thirds of a mile thick at the base. It reservoir 49 miles long, enough to includes a 130-foot-wide, two-mile- double the country's irrigation, and an long highway across the crest, and has provided Egypt with 320-mile-long country's power output. Lake Nasser, one of the world's largest reservoirs. In addition, there is a complex of downstream turbines that in 1970 added 10 billion kilowatt hours to Egypt's power capacity. In Syria, the recently completed Tabqa or al-Thawra Dam, is possibly the largest earth dam in the world: 2.6 miles phenomenon of arid lands. Flash floods

1,800 feet bank to bank and is two across and 196 feet high, with a electricity complex that will triple the

> Nevertheless for Saudi Arabia, which has no rivers of any size, let alone the Euphrates or the Nile, the Jaizan Dam is still an important project. It has, for example, already blunted the dangers and sharply reduced the waste of the flash flood, that



occur because in countries such as Saudi Arabia where there are virtually no trees, and only sparse vegetation to absorb excess rainfall, the runoff races swiftly into wadis and valleys, builds up a head of water, sweeps downstream at an incredible and destructive rate and is dissipated in the sand. In the Jaizan area the dam has all but eliminated the incidence of such floods.

tions it will nourish precious farmland, encourage the introduction of new crops and make rural and agricultural industries possible. Furthermore, the Jaizan project is serving as a model for eight more dams now being planned or under construction. These are al-Alab and al-Hair dams in the Hanifa Valley, the Shaqra Dam, the Glagil Dam in al-Gaht, the Thadek Dam, the Wadi The dam's chief role, however, is Saab Dam, the Liyab Dam and the in agriculture. If it fulfills expecta- Mared Dam. Seven of the dams are





being designed to recharge wells, some to provide drinking water, some to provide irrigation. The Mared Dam, with a complex of dikes and spurs, is to provide flood control.

But above all the Jaizan project is a stride toward one of the kingdom's goals: the utilization of every asset in the country for the betterment of the country's people.



South and east of modern Cairo, between the old Roman fortress called Babylon and a cemetery known as the City of the Dead, lies a square mile or so of utter desolation. Nothing grows, there is nothing green. In every direction stretch endless low gray mounds.

Unpromising? Perhaps. But those heaps of dirt are worth another look, for they are not just dirt. They are the rubbish dumps of Cairo, and have been for the last 800 years. Underneath them, sometimes as much as 18 feet down, lie the foundations and remains

of a city that flowered 1,000 years ago, Fustat, City of the Tent, founded in the 7th century by the Muslim conquerors of Egypt.

For some 500 years after the Arab conquest of Egypt, Fustat flourished as a center of commerce and trade which extended east to China and west to Spain. In the 10th century, however, the Fatimids came to Egypt from Tunisia to found a city nearby: Cairo, soon to be the center of a new caliphate and a new empire.

Two hundred years later Fustat was little more than a memory. To stave off the Crusaders in 1168, Fustat was set on fire and flames raged for 54 days. Fustat was burned and later vanished under the low gray mounds by the City of the Dead.

In the 20th century, archeologists have uncovered a great complex of streets and houses and retrieved ceramics, glass and woodwork. Some are still at it and one of those involved in this work is the author of this sketch.

was a midwestern housewife and until 1971 spent most of my time looking after B my family, shopping and chauffeuring the children to school. Then, in the fall of that year, my husband returned to teaching at the American University in Cairo (A.U.C.) after four years at the University of Michigan. We renewed an old acquaintance with Dr. George Scanlon, the American archeologist who has been excavating at Fustat since 1964, and suddenly there I was being asked to join an archeological expedition in Egypt as a pot sorter and artist! I had taken courses in Islamic Art, I have a good eye and a steady hand at drawing, but best of all, from Dr. Scanlon's point of view, I would be in Cairo at the right time.

It meant abandoning my family to the uncertain hazards of cook and nanny for two months. It meant getting up every morning at 6 a.m., driving to Fustat and squatting on a campstool for two or three hours a day. And it meant learning a cryptic terminology as I pawed through heaps of Mameluke and Fatimid graffiti and tried to distinguish between lead, tin and siliceous glazes, or to identify a Coptic doll, a glass weight, a piece of stucco sculpture. But I didn't hesitate and for the next two months joined the dig.



The other members of the expedition were Dr. Wladek Kubiak, the deputy director, and Antoni Ostrasz, the architect, both from Poland; John Forsyte, a history student and novice like myself, who sat in my vicinity on his campstool most mornings, also muttering; Clare, a glamorous lady draftsman with auburn hair, pencil behind the ear, who kindly guided me through my first tottering steps as an archeological artist; and two raven-haired undergraduate nymphs from A.U.C. With them I shared joys, troubles, cigarettes, coffee and jokes.

After the day's pot-sorting was finished, we would move to a massive book, wherein are recorded details of all the trophies from Fustat found in the past five seasons. Similar information was also recorded on cards and the objects would be sketched and put for safekeeping into shoe boxes or, if valuable, into locked wooden boxes. When work stopped around one o'clock my motherly instincts struggled to reassert themselves; flagging and famished I went home.



Meanwhile about 200 yards south of the tent area our team of Ouftis did the work of digging. Named for Quft, their home village in Upper Egypt near Luxor, Quftis have been trained archeological diggers since the time of Sir Flinders Petrie in the late 19th century and have become the labor force upon which most archeologists in Egypt rely. They are highly skilled in carefully laying bare stratum after stratum of the excavation, without damaging potsherds and other artifacts.

The foundations and remains of 8th-Monday, September 20. I did a lot of through 11th-century Islamic buildings, sorting, making very tentative distinctions, -areas of flooring, sections of wall, steps, then went down to see the human bulldozers lintels-and water courses constitute a at work clearing off the mounds. Strings fascinating three-dimensional jigsaw puzzle. of men and boys were hauling baskets of To piece together the puzzle required dirt up the hill from the level of the excavapainstaking study which I noted, day by tion, silhouetted against the skyline, chanting day, in what would be my diary of a dig. to the lead of the old rais. The coffee boy Saturday, September 18. The day I have brought a kettle of hot water from his been looking forward to for months has Primus stove somewhere behind the scenes, arrived. I turned off the main highway and we had a welcome cup of coffee. I between barren hills toward the Cairo city continued to struggle with drawings and dump and walked south. Three tents with my own high-handed attitude toward appeared above the rubble in the early facts. morning haze, then four more lower Tuesday, September 21. I find leading a down the slope. In the distance, a ring double life, wife-mother/pot sorter-artist, of mosques, the cries and clatter of the a bit taxing physically, but the dividends city faint on the fringes of the emptiness. are worth the expenditure. I got very The sand around the tents was raked and discouraged trying to draw a sort of multifaceted but irregular lump of pentametrical clean. Eight baskets of potsherds stood against one canvas wall. Antoni, the Polish marble of inexplicable origin and purpose. architect, was there and introduced himself I went to see the Quftis, but was mystified by the jigsaw puzzle of the dig. and two other helpers, who lost no time in

putting me to work.

They first initiated me into the business of sorting the potsherds onto a clean plastic

sheet. In each basket were 200 or 300 pieces of broken pottery, most of them locally made. More interesting and obscure pieces invited closer scrutiny: there were imported wares from Spain, Tunisia, the Eastern Mediterranean, Persia and China; then there were small bottles and fragments of delicately shaded glass, wooden spoons, ivory backgammon pieces, beads, coins, stucco, metal and bone, combs, kohl (mascara) sticks, and other ancient household debris. I puzzled slowly over my baskets for about two and a half hours. Then one of my new colleagues explained how to draw the objects which merited registration and how to take precise measurements. It is a trial to my soul to be so absolutely accurate, and to resist the temptation to make a drawing look as one thinks it ought to look rather than as it really does look.



Wednesday, September 22. I labor on my apprentice drawings. The girls are critical of my accuracy.

Thursday, September 23. I went exploring the site with a map. The categories of pottery are coming a little clearer. Keep the faith and perhaps light will dawn. They are excavating one of the drainage pits, and today they found an unglazed amphora, rosy, Roman-looking and undamaged. Curved lip, narrow neck, sloping shoulder, bulbous body and pointed bottom! To be drawn to scale, reduced to a quarter of its original size.

Monday, September 27. I went to work at 6:45 a.m. and saw the sun rise as we drove along the Corniche beside the Nile. The whole city lay misty and pearly, bathed in an apricot haze. The camp was cool and quiet. The *mudir* told us marvelous tales of previous seasons, while I was trying to reproduce accurately dribbles of green and yellow glaze on an ancient, significant but unattractive pot.



Wednesday, September 29. This morning I went very early and sorted three or four baskets. Then I drew a complicated small piece of carved wood with scrolls and leaves—probably an inset in a screen or piece of furniture; wood, being rare, was used conservatively and lovingly by early Islamic architects and artisans. I had a long talk with the *mufetish*, or government inspector, Midhat.

Thursday, September 30. Today was biweekly payday. The mudir arrived about 11:30, hot and bothered, having spent three hours at the bank because they hadn't enough five-piaster notes. The Quftis and all the 150 workers straggled up from the bottom of the mounds to the pay tent where Dr. Scanlon and Antoni sat behind a table, a pile of money in front of them. Next to Dr. Scanlon on his right sat Ramadan, calling out the names in a rasping voice, specifying how much each man had earned, getting them to sign their names as they received their money. Next to Ramadan in the door of the tent sat the blue-robed rais, a man of considerable dignity, who very

graciously motioned me to a chair, ordered me a glass of water and gave me a cigarette. Most of the younger men could write, quite a lot of the older ones had seals with their names on them, and one or two had no seal and let Ramadan take their thumbs, press them in the purple ink and then in the space for their names. There were at least eight or nine very old men with seamed faces who looked tired after six hours hoeing and carrying dirt in the hot sun. Then they ranged all the way down in age to the youngest, who appeared no more than eight, and who still had a look of merry curiosity in his eye, an antediluvian tennis hat on his head and red sneakers. They waited, shuffling their feet, their eyelashes full of dust.

Saturday, October 2. A hydraulic chemist from Detroit came looking for soil samples from the pits, which acted as sewers as well as repositories of broken crockery and therefore were the receptacle of plenty of germs and microbes beautifully preserved in uric acid crystals.

Saturday, October 8. Today we had a tour of the elaborate drainage tunnels under the foundations of a large Fatimid house. We were let one by one down a pit and walked for several yards underground, expecting to find the entrance to a cave. Then we received an explanation of the funerary route which they are uncovering. It is a not very wide street, running from west to east, from Old Cairo to the Tulunid graveyard east of Fustat. The road predates the houses and the lowest level of the roads is all seventh and eighth century. Dates are established by means of glass weights, coins and pottery types.



Sunday, October 17. The tempo has changed a little now that they have finished clearing away the rubble and are concentrating more on careful clearing of pits, canals and foundations. Not so much stuff comes up to be sorted, and it is of a different nature and mostly from the early period;

there is very little glazed ware, a lot of redware, some tinted glass, and some precious pieces of white Chinese porcelain. Dredged up from the undisturbed strata of the pits, these items are of far more value as scientific dating materials than the potsherds from the rubbish dumps, and must therefore be preserved and recorded with greater attention.



Today we went for a long walk with Midhat, the inspector, across Fustat, first to a 10th-century Fatimid house reconstructed by an Egyptian archeological team, which gives some idea of the type of structure that would have stood over our foundations. There are interesting variations of brick and stonework in the walls and vaults. Then we went over the mounds to the current Egyptian-supervised dig, where we were greeted by another chorus of cheerful Ouftis. They have uncovered a long section of water pipe running through the garden of a house and off towards the wall of Saladin, all embedded in masonry with special devices for making the water run uphill.

Our dig is becoming one of the attractions of Cairo. More visitors: the treasure box is displayed and our precious objects taken out of their cotton wrappings to be admired, especially two prize pieces found in a pit: a lustre albarello with coppery gold peacocks facing each other, and an exquisite silvery white glass ewer with small pointed pouring lip and moulded decoration of a geometrical fountain.

Tuesday, October 19. The *mudir* came with a svelte former ambassadress in tow who was borne off in wonder to view pits, canals and Quftis at work. The contents of the treasure-box were displayed with consummate showmanship and an invitation extended to lunch on the houseboat where the team lives. The hope: a helpful and informed voice in Washington, D.C., source of our support.

Wednesday, October 20. It is the first day

of Ramadan, the Islamic month of fasting. By noon the Quftis, who have had nothing to eat or drink since dawn, are looking peaked and drawn. They will fast until sunset. The sun is paler and an almost chilly wind is blowing through our camp. I sorted the pots by myself, no John to chatter with. He was down among the foundations supervising and recording a section of the east-west street, which looks like a slice from a rather gritty layer cake.

Monday, November 1. I laid out five baskets of unglazed redware and tried to get the hang of recording it from Dr. Kubiak. Imported wares from the Eastern Mediterranean are his special pets, and he spends the morning prowling round the plastic where the sherds are laid out, rapt in contemplation, whistling to himself.



Tuesday, November 2. Plenty of work. Many objects to be registered and drawn, many baskets of different things to be laid out and recorded. Rather a feverish atmosphere hangs over the camp. People are a bit edgy—apparently a common complaint of archeological expeditions after the first excitement has worn off. But the weather is glorious: it actually rained, the dust was laid, and the earth refreshed. In a last bid to find more treasure, a makeshift pump was set up and bucketfuls of muddy water dredged up from the bottom of a couple of flooded pits. Alas, no dramatic results.

Tuesday, November 9. We are winding up the dig. All but five of the Quftis were paid off; they dismantled their tents and left on the train for Quft. I typed up the *mudir's* interim report, a gutsy document. Everything has to be sorted out, photographed and disposed of. I laid out for photography all the special potsherds, glass, beads, wood, marble, stucco—an intriguing but at times rather exhausting job, as it involves so much bending over. Even the least interesting objects still have subtle color, texture, shape, and one could

spend hours setting them up for arty shots. Time rather than quality was of the essence, however, so ingots, wasters and kiln furniture got rather summary treatment.



Sunday, November 14. We finally lined No more rising at crack of dawn to go to everything up. John and I sat in the grid the rubbish dumps, but I spent two more where all the contents of the pits and leisurely weeks inking drawings and typing foundations had been carefully kept and entries on the houseboat in the surprising examined, but were no longer inherently chill of late November and early Decemuseful. We heaved them into the huge slit ber. With the sunlight falling across the trenches left from previous soundings. The Nile and through the bow window onto contents of the tents were packed up and the worktable, Clare and I made inked neatly labeled by Clare. All the tents but drawings, typed cards and knew the 177 one were dismantled; a white horse and a registered objects of the '71 season by black donkey appeared with gharrys. All heart by the time December arrived. was loaded up and taken away to the storeroom.

Wednesday, November 17. Today, I witnessed the dismantling of the last tent, the *mudir* in an orange sweater with hatband to match and in, for him, a very bad temper, engaged in a game called "waiting for the inspector." We eventually proceeded to the storehouse. Our progress was hampered for most of the way by a good-natured multitude of people in holiday spirits. Piled onto flat-bottomed donkey carts in bright-colored confusion dramatically set off by the black meleyas of the older women, the whole populace, it seemed, was making its way to the graveyards east of Fustat to celebrate the Little Bairam, the end of the Ramadan fast, with oranges and sugar cakes to be eaten in the company of the dead. This custom is extremely ancient, and dates back to Pharaonic times, a thousand and more years before the advent of Islam.

The storehouse stands in a moon landscape in the south-western section of Fustat, which was excavated 40 or so years ago. It is quiet and cool inside, lined with dozens of boxes of loot from previous years. The few remaining unrecorded objects still had to be drawn—a zoomorphic head of a marmoset with a lopsided mouth and pop eyes, a reconstructed redware pitcher, an

ibex head, two sherds of Mameluke graffiti—one depicting an eagle pouncing on its prey and the other a hand holding the legs of a falcon; the beautiful green glass bottle, delicately shaped and fluted, that my husband had reconstructed out of a dozen fragments during a visit to Fustat, now stuffed with cotton-wool and swathed in string, and a complete early Aladdin's lamp decorated with hearts and sprigs. Also a complete *qulla* (water bottle) filter, lavishly intricate for such a common household object, thanks to the exuberance and fancy of the Fatimid potters.



The team flew off to various parts of the world one by one, Dr. Scanlon and Dr. Kubiak bearing copious documentation to be labored over and compiled into scholarly shape during the coming months.

I was quickly engulfed by household and family and their multiple demands once more. It was high time. The cook was proving a Mameluke of the kitchen, extravagant and bossy, the nanny had left and it was time I returned to my poor neglected children.

Elizabeth Rodenbeck grew up on a farm in Sussex, England, and later traveled to America, where she met her husband, a professor of English literature.



"We gathered round an old oil lamp, like the lamp used by Florence Nightingale, recited the nurses' oath and received our caps."



Nutsing in the Atab East





Sitt Adele Jabbour (both photos, preceding page), who earned a nursing diploma at an American mission hospital in Tripoli, Lebanon, makes her rounds in the village of Shemlan near Beirut.

n Saudi Arabia's Eastern Province a covey of abba-clad girls alight, one by one, from a bus, and skitter, laughing and chatting, up the steps of the Hofuf School of Nursing. Doffing their flowing cloaks, the 20 girls file into three classrooms and begin their day of study with a recitation from the Koran. In Cairo, 1,000 miles away, 400 Egyptian girls in kerchiefs, smocks and pantaloons gather in a practice ward at the 'Ain Shams University Nursing School. Outside Amman, at the Princess Muna College of Nursing, Jordanian Army nursing students in tall lace caps and brass-buttoned uniforms stand smartly at attention for their Matron-Colonel's briefing before beginning their rounds in the newly opened military hospital.

These girls, ranging between the ages of 14 and 20, with backgrounds varying from modern to medieval, are about to embark upon an exciting journey: the journey into nursing in the Middle East. The Saudi girls will go into midwifery, the Egyptians into general hospital nursing and public health and the Jordanian cadets into the technical byways of modern medicine. They will travel everywhere by every means: to new hospitals in bustling cities, to Bedouin tents in the shimmering desert, to mud houses along papyrus-clad rivers and to stone villages straggling up terraced mountainsides. Some will earn degrees from universities, some will become hard-working practical nurses and some will pass their years bringing forth infants, squalling and red-faced, whose childhood will be overseen by others who choose public health. But the goal of their long arduous journey will be the same: a healthy Middle Eastern society, healthy in spirit as well as in the flesh.

The growth of nursing in a particular society generally indicates that the status and education of its women are improving. Indeed it is possible to say that the levels which the nursing profession has attained in a country is a very good indicator of the level of overall development of that country. In the Middle East the levels vary considerably.

In the newly developing areas of the Middle East, particularly along the Arabian Gulf and in Saudi Arabia, nursing is a new idea. But it is an idea that is rapidly taking



hold as the people of these countries propel themselves into the modern world. In Saudi Arabia, for example, there are some 50 government hospitals and 175 dispensaries now in operation. Admittedly, most of these facilities and similar facilities in the Gulf are still dependent on nurses imported from Asia, Egypt, Lebanon, Europe, the British Isles and the United States. But the countries have begun to establish modern nursing schools and are already turning out practical nurses able to staff at least some of the facilities. As early as 1950, for example, the Arabian American Oil Company

founded a nurses' training school in Dhahran which provided the guidelines for what has become an extensive training program for practical nurses in such areas as Hofuf and Dammam. In Bahrain the government opened its first nursing school in 1959 and there is today under construction a modern 500-bed hospital with training facilities for 60 nurses a year. In Dubai last year, a British nurse from Zanzibar opened a nursing school affiliated with the new Rashid Hospital.

Along the Levantine coast, nursing has a much longer history. It goes back to 1847seven years before Florence Nightingale landed at Scutari in Turkey during the Crimean War and founded the modern secular nursing profession. In that year, French Sisters of Charity established a hospital in Beirut, recruited local girls for training as nurses' aides and made Lebanon the medical center of the Middle East.

But even in Lebanon the levels differ. Within a 10-mile radius of Beirut, on any given day, can be found Miss Abla Bsat, Bachelor of Science graduate of the American University of Beirut, sitting before a heart monitor in the American Hospital's coronary care unit; Sitt Adele, a rural nurse with a diploma from a hospital in Tripoli, trudging through her mountain village on house calls; and Umm Fawzi, a traditional midwife with up-to-date training and equipment, delivering babies in the suburb of Bourj el-Barajneh. Each of these women, one a specialist, one a competent generalist, the third an experienced, though illiterate, expert, contributes in her own special way to the health and well-being of her people. From three different worlds, living within a few miles of one another but never likely to meet, all three equally represent the nursing profession in the Middle East. You will find their sisters -and a few brothers as well-in and around every Arab capital and town: technician, general practitioner and traditional midwife.

Miss Bsat is a specialist working in a world of specialists. Enrolled at the American University School of Pharmacy, she was, at the eleventh hour, persuaded by her family doctor to switch to nursing. In June 1971, she graduated from the university's new four-year Bachelor of Science nursing program and two weeks later joined the coronary care unit. Today she is the youngest head nurse in the hospital.

Miss Bsat-whose well-to-do parents backed her decision to become a nursealso represents a break in the traditional conviction that nursing is an unsuitable profession for girls who can afford better. Once widespread, this conviction has begun to weaken everywhere. It is true that Arabia is by no means free of the conviction that nursing is an "improper" occupation for young women. Out of 1,279 nurses on government rolls in Saudi Arabia, for example, only 529 are women and of these only 47 are Saudi girls. But even in Saudi Arabia breakthroughs have been made. Samra Islam, one of three daughters in a wealthy Jiddah mercantile family, earned a Bachelor of Science degree in nursing and now works in Aramco's Maternal-Child Care Clinics in Dhahran. Moreover, one sister, Amira, is a pharmacist and the other, Sara, an opthalmologist.

No concern about the suitability of nursing troubled the widowed mother of Sitt Adele Jabbour when Sitt Adele determined, at the age of 15, to seek formal nurses' training. For her, Christian and needy, Sitt Adele's occupation was a financial neces-









Badr Iskandar, "Umm Fawzi" (left and below) is a "dava." or midwife, who delivers babies in a Palestinian refugee camp near Beirut, A United Nations agency helps her and others such as Nadia Yacoub (below, right), by providing some modern training and materials. including medicines with simple pictorial lahels.



Abla Bsat (left), who has a BS degree in nursing from the American University of Beirut, monitors a heart beat at the American University Hospital. The AUH also trains practical nurses (a recent class graduates, below, left) and has what is probably the Middle East's most modern pediatrics department.





sity-as it was for the majority of Middle Eastern women who went into nursing 25 or 30 years ago. Indeed, until about 10 years ago, nursing was the major route to education and social betterment for girls from the Armenian, Maronite, Nestorian, Chaldean, Melkite, Protestant, Greek Orthodox and Coptic minority communities. And today their daughters and granddaughters have often gone several steps further. Mrs. Vathouhy Artinian, an attractive Armenian girl, serves as a specialist in the kidney unit at the American Hospital where her mother had been a practical nurse.

-like Abla Bsat and Samra Islam-are by no means common in the Middle East. And those who hold degrees are generally found in the modern hospitals in Arab capitals or teaching in schools of nursing. Indeed, until recently, when the American University of Beirut and the Jordanian University inaugurated their own B. S. programs, girls who wanted university degrees in nursing had to go abroad. The rest usually went into three-year diploma programs at various private and government nursing schools. As in the United States, Britain and Europe, the three-year diploma nurse becomes a Registered Nurse, or "R.N." In addition to the diploma course, most Middle Eastern hospitals also offer 18 to 24 months practical to learn and work at the same time.

has been generally restricted to the maternal care provided by dayas-the ancient sisterhood of midwives. Although they are the relics of a medieval society, dayas like Badr Iskandar, better known as Umm Fawzi, still deliver the majority of babies born in A girl studying in the French system, for the region. Umm Fawzi has been a daya for

more than 25 years and her grandmother and great-grandmother were dayas before her.

But even in this field there have been important changes. Arab governments, in cooperation with United Nations health experts, have begun to tap and harness this ancient and honorable profession, using the old to build the new. Rather than attempt to suppress the dayas-whose talents they cannot do without anyway-the governments have instituted "daya control" programs whereby dayas must learn the basic modern skills of midwifery to qualify for a Nurses with Bachelor of Science degrees license. Thus old hands are taught how to carry out pregnancy tests and to sterilize their equipment before a delivery. When Umm Fawzi sets out on her rounds in a Palestinian refugee camp outside Beirut she still wears her traditional long white dress and flowing scarf, but she also carries with her a kit developed by and regularly inspected by the United Nations: scissors, forceps, eye swabs, gauze, eye drops, cotton balls, antiseptic solutions, packets of sterile thread and bottles of medicine labeled with simple, clear pictorial signs. For although all dayas can expertly deliver babies, many cannot read.

The differing levels of nursing care in the Middle East reflect not only country-tocountry differences in medical advancement nurses' training to girls and boys who want and social development but also the training programs themselves. Within the area there Outside the cities, furthermore, nursing are a multiplicity of training programs: those run by governments, by diverse foreign missionary societies and local charitable associations, by oil companies such as Aramco and by United Nations agencies. Each system promulgates its own theories. instance, concentrates more on theory, while



Samra Islam (left and below), of Jiddah, Saudi Arabia, holds a BS in nursing and works in Aramco's Maternal-Child Care Clinic in Dhahran.

> British and American schools stress practical experience.

> There are also country-to-country, and hospital-to-hospital, differences in admission requirements. In Jordan and Lebanon, where the basic educational level is quite high, particularly for girls, prospective nurses must have completed high school. In Egypt and Syria, the requirement is one or two years of high school. In Saudi Arabia, where high school education for girls is relatively new, and where the conviction persists that educated girls must do better than nursing, requirements are necessarily more flexible.

> Students in government nursing schools throughout the Middle East receive their room and board and a small allowance while they study. In return they usually must serve in field clinics, provincial hospitals or in other government capacities for two to three years.

> In Egypt there are nurses' training courses in every provincial hospital. From these hospitals the new nurses are assigned to clinics in agricultural development centers throughout the countryside. Moreover, it has long been Egyptian Government policy to send a large number of trained nurses to Arab countries in need of hospital staff, particularly to Saudi Arabia and the Arabian Gulf.

> Jordan is now making a special effort to train modern midwives to staff the 34 maternal-child health centers which constitute the basic units of its public health service. At present such centers depend on the traditional midwives like Umm Fawzi, but eventually the dayas will give way to the modern midwives: already young women are turning away from traditional daya training, preferring the new independence



Vartouhy Artinian (left), an Armenian-Lebanese nurse, is a specialist in Beirut's AUH kidney unit. Below, center, a Jordanian nurse gives an inoculation at the modern Amman Civil Hospital.



Although there are sharp differences in levels of care and regional peculiarities, nursing in the Middle East is still more similar than dissimilar to nursing elsewhere in the world. There are long hours. There is low pay-the average salary is \$100 a month and the top \$200. And there is dedication to the profession. The capping ceremony that is as familiar to a nurse in New York as it is to sisters in the Australian outback gave Sitt Adele, in Tripoli, Lebanon, one of her warmest memories: "We gathered round an old oil lamp, like the lamp used by Florence Nightingale, recited the nurses' oath and received our caps." This ceremony, carried out in English, French and Arabic throughout the Middle East, and the dedication it represents, unites in this magical moment one nurse to every other. It is the cement which brings nurses together in the face of family opposition, low pay and the fears and suspicions of their patients of modern medicine.

Such fears and suspicions are now waning, but until recently were widespread in the Middle East. In Jordan nurses found that dealings with reluctant tribesmen could be particularly trying. If the tribesmen knew that a mobile clinic was to be at their camp on a certain date, they simply moved away. If referred to a hospital, time and time again a Bedouin patient would refuse to budge, preferring to stay among family and friends even if a stay in hospital would mean recovery. One Bedouin woman insisted that a visiting nurse deal on the spot with a finger nearly severed in a harvesting accident rather than making her leave home to see a doctor.

Yet the nurses are turning the tide. With persistence and ingenuity they have gradually convinced both villagers and nomads that they do good, not harm. Today clinics throughout the region are busy, their halls crowded with patients, young and old, who would never have seen a doctor or a nurse a few years ago. In Jordan, a group of Irish Franciscan nursing sisters carry out sophisticated tests and analyses from a mobile pathology laboratory and in the outskirts of Amman operate a "rehydration" clinic where fluids are restored to babies seriously dehydrated by various intestinal illnesses endemic to the Middle East.



"The Bedouin no longer try to escape us," asserts Andaleeb Arida of the Save the Children Fund, "because they have seen the results of our visits-healthier babies. We do preventive care, teach the mothers what to feed their babies and how to prepare nourishing food, give inoculations and refer cases for treatment to government clinics. So now they wait for us to come; our visit has become a social event, the mothers of one clan gathering in a tent to have their children inspected and drink a glass of tea." Nurses in the Arab world are not stiff in their starched white uniforms; they have too much to do besides what can

be called "nursing" in the strict sense of the word.

The shining new hospitals a-building in and around Arab cities are also making converts. Now when referred to the splendid Amman Civil Hospital, Bedouin patients need no coercion: they seek admittance and feel quite at home in the bright, airy wards with their plate-glass views of the stony hills round the hill-top building. It has taken time to win their confidence, but since the breakthrough was made, there has been an unending stream of sick and undernourished to hospitals and clinics. Aramco alone treats more than 500,000 people a year in its outpatient operations in the Arabian Peninsula, making it one of the largest outpatient clinics in the world.

Behind this change is a series of hard-won medical victories; successful cures are naturally the best advertisement for a nurse, a doctor or a clinic. Umm Fawzi, for example, says she has never lost a patient. "I make them laugh and they deliver quickly," she chuckled. "And I always call a doctor when there are complications."

Sister Damien of the Indian Missionaries of Charity brought a whole tribe to a clinic when she operated successfully on the Bedouin woman who nearly lost her finger. "The finger was nearly detached," said Sister Damien, "so I had to either replace it or amputate it. I chose to stitch it back on and fortunately I have a great deal of experience in stitching. I had several years in a leper colony."

To most nurses in the Middle East, such unexpected challenges are commonplace. In Lebanon Sitt Adele once had to give five injections a day for seven days-to a cow. "It was my most difficult case," smiled Sitt Adele. "I was terrified of





In Jordan (clockwise, from above right): a nurse lectures to women at the Amman Maternal-Child Center about children's nourishment; an army nursing officer in the operating room at the new King Hussein Medical Center in Amman; Andaleeb Arida, a child health visitor with the Save the Children Fund, talks with Bedouin women in the desert near Maan, in south Jordan; therapists work with handicapped children at the Amman rehabilitation center; Jordanian mothers submit specimens for analysis at the Franciscans' Mobile Pathological Laboratory in the outskirts of the capital.



An Irish Franciscan nursing sister (left) treats a child at the rehydration clinic run by the order in Amman, Jordan.





Sister Pascal, an Indian nurse of the Missionaries of Charity, treats a patient at Qarn in the Jordan Valley.

that cow. The veterinarian taught me how to do the injections. You put the needle in first and then attach the glass tube with the medication, for cows have very tough hides. But, what to do? I couldn't refuse; that cow was very valuable." Sitt Adele saved the cow and received four quarts of milk in payment.

Some of the most striking changes have been wrought in the nurses themselves. An Egyptian village girl studying at 'Ain Shams University might arrive in a long peasant dress but she soon saves enough pocket money to buy a miniskirt and blouse to wear in her free time. She learns Ping-Pong, decorates her room with pop-star posters, dresses up to go out. Fine feathers do not, of course, make fine birds, nor do miniskirts make modern women, but new clothes and new ways do indicate new attitudes and ideas.

Behind this new confidence is the nurses' awareness that they are at the top of their profession since, so far, men have generally gone in for practical nursing and work as nurses' aides. Thus, as wage earners, women nurses have better positions in their families and communities, particularly vis-a-vis their husbands. Today, in fact, a nursing career improves a girl's eligibility as a wife. Although many nurses once tended to marry unskilled workers, they now, according to Mrs. Fayez Tell Haidar head of nursing at the Amman Civil Hospital, do much better. "Many of our young Arab doctors now marry Arab nurses they meet on the job. These doctors used to marry foreign girls, often nurses whom they met while they were specializing abroad. Today they can find their own countrywomen working beside them."

It is easy to see, nevertheless, that a Middle Eastern girl who goes in for a nursing career is made of stern stuff. A nurse in the Middle East today must be all things to all people. The challenge is enormous and the material reward small. But, then, there is the greater satisfaction of presenting the world with a healthy baby and watching him grow into a tall, straight youth, of achieving cleanliness where there was dirt, of bringing forth light where before there was darkness, health where there was sickness, confidence where there was only fear.

Michael Elin Jansen contributes regularly to Aramco World Magazine.









nurses at 'Ain Shams Hospital Nursing School in Cairo; Dar el-Shifa Hospital, Cairo; students attend a lecture at 'Ain Shams. Preceding page, top to bottom: girls at La Femme Nouvelle (The Modern Woman), a private nursing school in Cairo, on their way to classes and at the model nursery where some girls specialize in becoming trained nannies; at Dar el-Shifa, an Italian



Even a rolling stone leaves a track on the sands of time.



WRITTEN BY BETTY P. GREENE ILLUSTRATED BY DON THOMPSON

n 1870 a rolling stone came to a halt at the court of the Khedive Ismail of Egypt.

His name was Alexander McComb Mason and in his background were stints as a sailor, some civil war blockade-running, a term in a military prison and some experience as a revolutionary in Chile and Cuba. Now he was to serve for years as an administrator and explorer for the ruler of Egypt.

With one exception the background of Alexander Mason was conventional: the son of a Washington lawyer, George Mason, author of the Virginia Bill of Rights, and grandson of a man who had been the highest ranking general in the United States Army at the time of his death in 1841. The exception was McComb's paternal grandfather John Mason, also a general. Wealthy, high-living John Mason lived on Analostan Island in the Potomac where, since he liked entertaining, he built a large, handsome, airy Chinese house dedicated almost entirely to wild partying. Long since destroyed, the house was decidedly an exotic in its day.

So was the General's grandson. Early on, young Alexander had rejected the occupa-

tions that usually attracted young Virginia gentlemen—farming, politics, the law, the church—in favor or going to sea. While still in his teens McComb served as master's mate on the frigate "Niagara," which assisted in the attempt to lay the first Atlantic Cable. He did accept an appointment to Annapolis but, in 1861, resigned to join the Confederacy and to thus embark on a military career varied and vigorous enough to satisfy the most adventurous nature. He fought at Drury's Bluff, Hampton Roads and Charleston and ran the blockade off the southern coast of the Confederacy.

During the war, he also served as private secretary to his Uncle James, who headed the Mason-Slidell Mission from the Confederacy to England. En route to England, the Union Navy removed the commissioners from the British ship *Trent* in the famous Trent Affair. When finally released he and his uncle went on to England, but to no avail. Despite Queen Victoria's pro-Southern sentiments her prudent government withheld recognition.

Later, while blockade-running, he served with distinction until captured while commanding a contingent of sailors acting as



infantry at the Battle of Sailor's Creek. Imprisoned until the war's end, he emerged at the age of 25 to find himself barred from his profession and tempermentally unsuited to turning to farming. Like countless others, the sailor became a soldier of fortune and the stone began to roll.

At that time, Latin America was in ferment and in need of experienced fighting men. Thus, like many Civil War Veterans, Mason went south. He served first in Chile, in the rebellion against Spain, then, after a trip to China as mate on a merchant ship,



in Cuba, fighting with the revolutionaries. Later, still restless, he returned to the United States to find some unusual men recruiting for an unusual cause.

In the Middle East at that time, the ruler of Egypt, Ismail-Hereditary Khedive and Viceroy of Egypt under the Ottoman Empire-was looking to the future. Exposure to the west-he had been partially educated in France-and a sense of his country's importance after the building of the Suez Canal had persuaded him that Egypt should develop into a strong, viable nation free from domination by either Turkey or the great powers of Europe. To help him achieve that goal he decided to seek technical advisors from the United States-in those days a neutral power and a friend to the Arabs. Through the agency of Thaddeus Mott, an American with distinguished Middle Eastern connections (his wife was Turkish and his aunt married to a Turkish diplomat), Ismail had begun to recruit unemployed veterans of the American Civil War who could be hired independently, without governmental involvement.

For advice on this subject, Mott turned to General of the Armies William Tecumseh Sherman, who had a wide knowledge of officers from both sides of the recent conflict. From the names recommended by Sherman, Mott eventually chose some 50 officers to serve in Egypt under Union General Charles P. Stone (*Aramco World*, January-February, 1972), among them Alexander McComb Mason.

McComb Mason was among the first to go. To him it was an assignment with an

appeal far beyond merely making a living or putting his military training to use. It was adventure in an ancient, exotic world.

At first, adventure was slow in coming. Beyond service on the khedivial steamers there were few opportunities for a naval officer. But then General Stone assigned him to map the Oasis of Siwa, and his course was set. He accompanied Colonels Raleigh Colston and Erastus Purdy to Berenice on the Red Sea and to Berber,



across the Nubian Desert. Later he served as second in command to Purdy when they went to Darfur, both explorations part of a plan to map, survey and chart all of Egypt and the African hinterland of the Nile river system; to obtain scientific data; to define the borders of the Khedive's suzerainty.

Although the officers—from Chaille-Long in Uganda to Graves on the Gulf of Aden labored under incredible difficulties there were compensations. Off in the wilderness they were on their own, not bucking the entrenched bureaucracy of khedivial Egypt. And if there were frictions they stemmed from personality clashes rather than from the issues that had produced the Civil War.

For a man of Mason's complex personality there was more. Like Lawrence and Thesiger years later, he was uneasy with his own people but well adjusted to foreign peoples. He spoke Arabic fluently and got on well with Arabs. He was, as one man wrote: "romantic under a taciturn exterior ... industrious ... scholarly ... sensitive ..."

In 1876, Mason, returning to Cairo after a year and a half in the Sudan with Purdy and feeling—apparently with reason—that his superior was taking all the credit for their mutual effort, exploded. General Stone, realizing that his subordinate was essentially a misfit in Cairo, sent him off with Colonel H.C. Prout to serve as the Deputy Governor under the famous English General Charles ("Chinese") Gordon of Khartoum, at that time the Khedive's governor in Equatorial Africa.

From Khartoum Mason was assigned to follow up new discoveries at the headwaters of the Nile, especially Lake Albert Nyanza, which had been visited by English and Italian explorers but never accurately surveyed. It was an assignment tailored to his needs and in 1887 he left Dufile on the White Nile in the small steamer Nyanza, charting en route. He completely circumnavigated the lake, discovering the Semliki River which connects Lakes Albert and Edward and achieving a professional triumph that bore the stamp of Annapolis training It was so successful that when Prout left the Sudan, Mason stayed on as deputy governor to crusty "Chinese" Gordon.



Toward the end of 1878 it became apparent that the tenure of the Civil War veterans in Egypt was near its end. Ismail was better at conceiving plans than administering them and, as a result, his regime was in deep financial and political trouble. In June 1879, under pressure from European governments and the Sultan in Constantinople, Ismail abdicated in favor of his son Tewfik, thus bringing to Egypt an Anglo-French presence in which the Americans were less welcome. General Stone, however, survived as Chief of Staff and kept with him three of the American officers who had been primarily interested in exploration-Purdy, Prout and Masonall of whom chose to accept civilian employment from the Egyptian government.

Although McComb was now Mason Bey —a title of honor—his habits were well established. He had been with Gordon again in 1878 and in 1880-81 was sent on surveys in the Fayum and elsewhere. In the Sudan he took a keen interest in the country. In 1883 he read a paper before the Khedivial Geographical Society analyzing the potentialities of railway transport there and at one point publicly criticizing their treatment by Egypt. He also suggested an unusual project. Why not follow the Liberian precedent and settle American Negroes desiring repatriation in the under developed areas of the Sudan? Possibly because he failed to consider how Afro-American Baptists would get along with African Muslims, the project excited little interest.

For several years, Mason also served as governor of Eritrea, at that time within the khedivial bailiwick. He also accompanied Sir William Hewitt on a mission to King John of Abyssinia as a result of which an Abyssinian-Egyptian treaty was signed at Adowa. In 1884 he undertook a mission to the Abyssinian General Ras Allula, then involved in hostilities with Arabs at Kassala. The American with an affinity for Arabs was proving diplomatically useful.

By now a director of public lands, he continued in the service of Egypt until, on leave in America, he died in 1897, "still," as the *Washington Post* obituary put it, "in the service of the Khedive."

The impact of the 19th century Americans in Egypt was not historically spectacular, but it did leave its mark. Years later British officers commented with surprise on the discipline and élan of certain Egyptian troops-so unusual in the Ottoman Empire at the time. And some of the exploration and mapping of large areas of Africa were direct legacies from General Stone and his officers. Above all, it was the first time a Middle Eastern ruler had turned to the United States for technical help on a fairly large scale. McComb Mason and his fellows-rocking across the desert on camels, serving at the khedivial court, navigating rivers and chatting with chieftains-were predecessors of the men who would one day bring American technology to the heart of Arabia-proof, perhaps, that even a rolling stone leaves at least a faint track on the sands of time.

Betty Patchin Greene, a descendent of Alexander Mason, has contributed articles to Mademoiselle, Harper's Bazaar and California newspapers.



WRITTEN BY CLIFFORD W. HAWKINS

"Plans?" the shipwright said, tapping his head. "The plans are up here."

PHOTOGRAPHED BY

CLIFFORD W. HAWKINS AND JOHN FEENEY

Preceding page: a sambuk near Aden. Below: a boom (recognizable by its extended bow stem) leaves Kuwait under both power and sail.







which Westerners call dhows vary in name and shape throughout the Arabian Gulf and Arabian Sea regions. Left, a ganja from Oman. Bottom left, zarooks at Aden. Right, a boom unloads cargo onto the mudflats at Matrah, Oman

rab dhows are among the oldest ships known to man, but to this day they sail the blue waters of the East, weather-beaten, hand-crafted

Not all dhows are the same. (In fact, they didn't even share the name dhow until the coming of European mariners.) They range ghosts from another age carrying the prodfrom 25-ton coastal vessels to ocean-going ucts of this one. Admittedly, some of today's dhows are - craft of 300 tons. (One, built in Kuwait centuries ago, is supposed to have run to considerably updated versions of the tradi-500 tons, but sank.) There are baghlas, now tional craft that once ranged from the nearly extinct trading vessels, with curved Arabian Gulf to East Africa. Sails are on stems, figureheads, transomed sterns and the wane and the descendants of the shipquarter galleries. There are sambuks, swift wrights who once built the now nearly extinct baghlas, sambuks, shewes, zaimas and passenger ships that were once common and are now rare, with low curved prow and high markabs now turn out sleek motorized stern. There are *jalboots*, often used for pearl dhows. Nevertheless, most shipwrights still fishing. There are ganjas and kotias. And scorn plans and blueprints in deference to there are booms, the biggest and most a tradition described by a Kuwaiti shippopular dhow afloat. Booms, which were wright when an English naval officer asked usually built in Kuwait and which reached to see the plans for a certain dhow. "Plans?" a peak of popularity between the two world the shipwright said, tapping his head. "The wars, are sharp at stern and bow-they do not plans are up here." And the dhows that survive are still unique: huge triangular have a flat transom stern—and have generous sails, square sterns, weather-beaten timbers cargo space and up to three masts. Their ornamentation is almost severe: decorative rubbed with shark oil, an ability to carry roses on each side of the head of the stern more sail in proportion to size than any post, black and white steering yokes and other sailing vessel, the mast tilting forward, flagstaff and some carving on the zoli, the and the stern-to-bow slope. This special silhouette of the dhow is a simple over-the-side toilet that is always a feature of the dhow. product of evolution in which the intuitive

skills of the Arabian Gulf shipwrights have, over the centuries, incorporated distinct features from the merchant fleets of India, Malaysia, Portugal, Holland and England. Who, for instance, could look at the high stern of the jadakarim, an Omani dhow, and not think instantly of a Spanish galleon

The Arab sailing ships



beating to quarters? Or an East India merchantman bound for Plymouth?

Where dhows originated is a matter of conjecture. Some experts say the Arabian Gulf, others India.

Wherever it was, development followed the realization, possibly 2,000 years ago, that the winds of the area followed a pattern as regular as the movement of the sun and



A zaima at Aden has decorative panels on her hull

the moon. From November to March the haskazi or north-east monsoon blew from the Arabian Gulf, down the east coast of Africa to Madagascar and Zanzibar or across blew all the way home again to Arabia.

It was a sensational discovery and soon the peoples of the area were voyaging down the Arabian coast, through the Straits of Hormuz, across the Indian Ocean, along the Hadhramaut, up into the Red Sea or down Gulf, all loading or discharging cargoes the coast of East Africa.

Such voyages are hardly remarkable by the standards of the 1970's. But considering that the nakhodas, the dhow masters, had no compasses and knew nothing of fore and aft sailing-which forced dhows generally to depend on prevailing winds-voyages to Africa were dangerous feats. Moreover, in those days, when the Trucial Coast was the Pirate Coast (Aramco World, November-December, 1973), trading dhows were frequently boarded and sunk by raiders blood of dhow trading for centuries. But themselves sailing in dhows.

Possibly because of such dangers and because of the uncertainties of completing voyages, the nakhodas in christening their vessels tended toward names with overtones of fatalism and faith: "By Allah's Deliverance," "In Praise of Mohammed," "As Allah Wills." These names still persist, even though today's dhows, with their diesels and compasses, rarely face hazards more threatening than seasonal storms and oil tankers ponderously bearing down on them in the narrow and crowded Straits of Hormuz, at the entrance to the Arabian Gulf.

The Straits of Hormuz is one waterway where seamen are certain to see dhows, but for close observation the famous Dubai Creek is better. In the creek, a long tidal inlet, a forest of masts pokes up from dhows

moored at the quay that runs the full length of Bin Yas Street on what is called "the Deira Side." The dhows come from all parts of the East and their masters advertise it with the sea to India. Later in the year the kuzi an enthusiastic display of huge ensigns that not only identify the dhowmen's nationality but also the company-usually Japanesewhich has sold them a diesel.

> In booming Dubai can be found traders from and beyond all ports in the Arabian amid the typically Eastern bustle of waterfront activity. There are Indian motor sailers like the Anwari of Bombay, disgorging sacks of onions, the Adel with a cargo of Basra dates, motorized shewes getting underway, one with a load of donkeys braying unhappily from the deck, another stacked high with sacks of fertilizer.

> These, and such other cargoes as copra, hides, wood, ivory, carpets, sisal, coffee, cloves, fruit and grains, have been the liferecently, as India developed modern industry and began to ship the goods of the 20th century to the Gulf and Africa, the cargoes have changed. Now the dhows are just as likely to be carrying anything from aluminum pots and pans to television sets.

> Kuwait is another center for dhows. Kuwait dhows, usually booms, used to be constructed in shipyards along what is called the seef, a coral-protected harbor along the Kuwait waterfront. But with the development of the oil industry and the growth of the city the seef declined. A particular problem was dumping. Rubble from razed buildings was piled up along the shore and eventually, when a coastal boulevard was constructed, the harbor was cut off from the shipyards. The shipwrights had to move-most went to a distant suburb





"The plans are up here." At left, photographs of ships in several yards demonstrate steps in building a boat using naturally contoured logs as ribs and shaping them slightly with an adz for planking. Rivet holes are made with ropepowered drills, cracks and chinks are filled by hand. Above, a boom with a strong keel sits high and dry at low tide.





Memories from the days when fleets of Arab trading ships rode the monsoons to India and down the coast of Africa: a collection of historic photos copyright © by NATIONAL MARITIME MUSEUM, Greenwich, London, Opposite page: a motorized boom in the Arabian Gulf.





-and when they did the old city lost one of its most colorful features.

Today in Kuwait there is barely enough activity on Kuwait's *seef* to evoke the nostalgic past. Beyond the modern deep sea port, the *Muhalaf*, one of the big *booms* that made Kuwait famous as a shipbuilding center, has been hauled ashore and at Kuwait's museum there is a fine collection of large-scale dhow models. But for the last traces of real activity you have to go to the suburb where a few struggling shipwrights, amid the scrape of adzes and the tattoo of hammers, still have the time, patience and endurance needed to build a dhow in the old way.

To start with, the Indian teak wood must be laboriously roughed out by hand. Taking advantage of the natural twists and bends in the wood workmen, using small adzes, cut the wood to within an inch of their bare toes, slowly shaping the keel, the stem and the stern posts. Next the outer planks of the hull are nailed on with special large-headed iron nails from local forges. As driving nails directly into the wood can split the dense teak, the shipwrights hand-bore holes for each nail and carefully wrap each nail in oiled hemp.

Such methods undoubtedly sound obsolete in contrast to shipyards like those in Japan that can build giant oil tankers in a matter of months. But they work; dhows, with any luck, can last 50 years. On the other hand, the demands of modern shipping are such that dhows are now usually motorized and to accommodate the engines the hull form is changing. Many dhows already look like oversized launches and in some sails have been reduced or eliminated. Clearly the traditional dhow is on the road to extinction.

For a time, no doubt, some relics will continue to spread their sails to the monsoons and head for Africa with their cargoes of both exotic and mundane items. But the dhow as it was is finished. What will be left will be a little more than a vague term and a fading tradition of craftsmanship and courage to equal any in the annals of sailing.

Clifford W. Hawkins, a New Zealander, a maritime researcher and a contributing member of the Society of Nautical Research, is writing a book on dhows.

