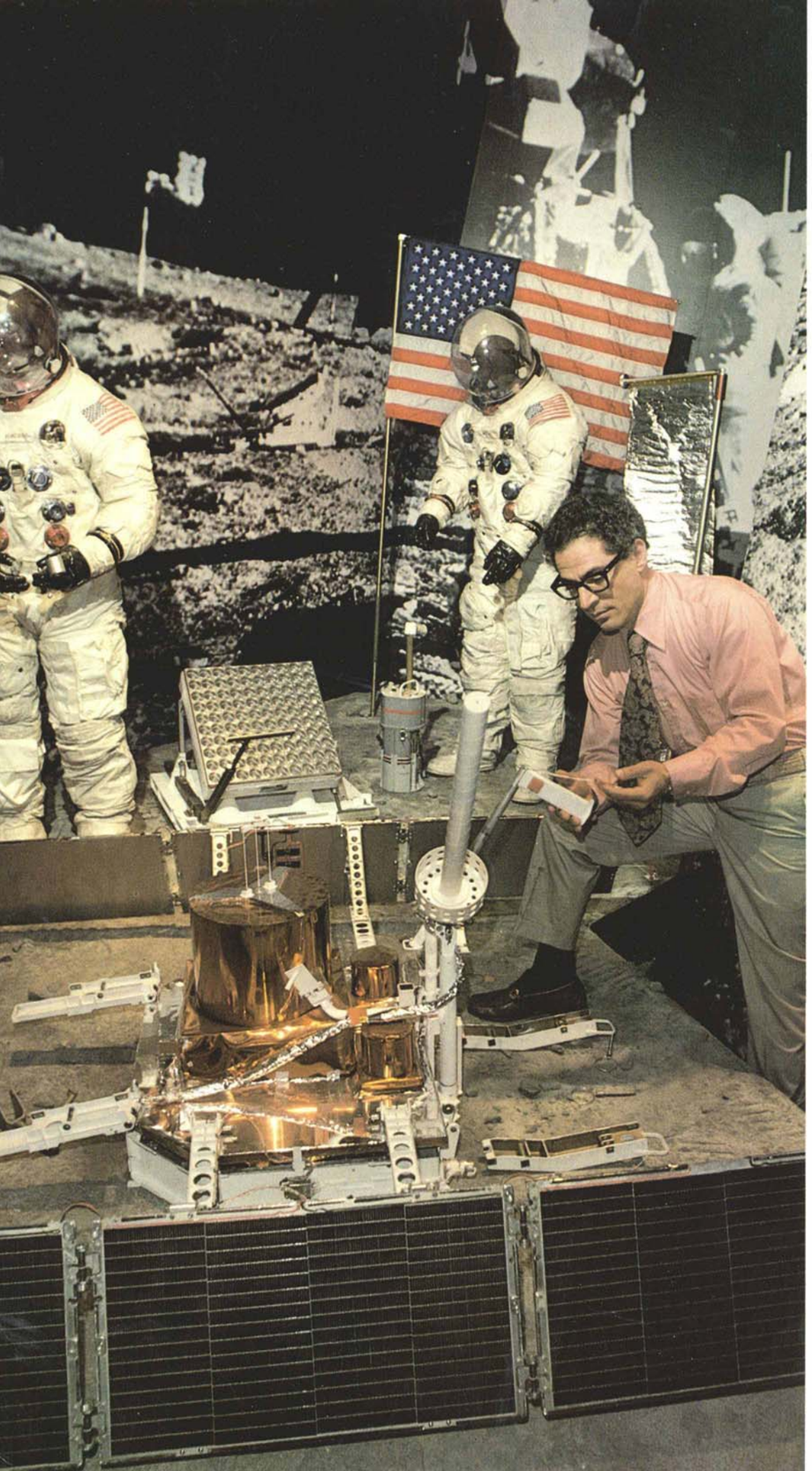

ARAMCO WORLD
magazine

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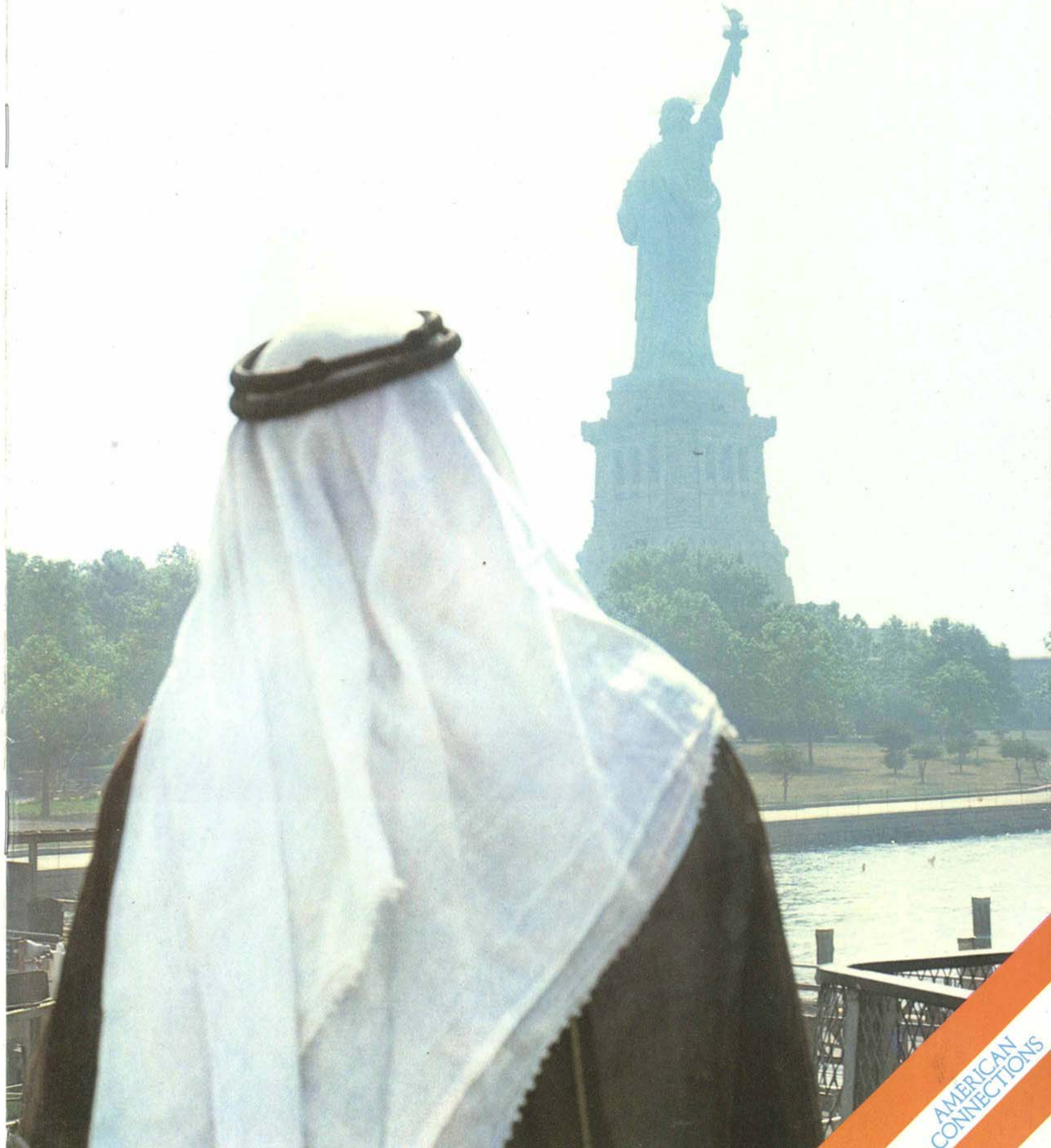
NOVEMBER-DECEMBER 1976



AMERICAN CONNECTIONS

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Cover: Photographer Katrina Thomas saw this Saudi Arab visitor to New York's Statue of Liberty as a symbol of the old, varied and sometimes surprising connections between the Arab world and America, connections growing in importance as the United States enters its third century. Rear cover: Dr. Farouk El-Baz has made important contributions to America's space program.

◄ Small girl, big donkey and the Stars and Stripes were all part of the 4th of July scene in Dhahran, Saudi Arabia, as Aramco's American employees celebrated the Bicentennial. Story and photograph on page 14.

Festival in Fall River

"...a time to find out what we still had and bring it out for everybody to see.

WRITTEN AND PHOTOGRAPHED BY KATRINA THOMAS

Between 1905 and 1921 there were 111 cotton mills operating in Fall River, Massachusetts. The remaining gray granite structures, pierced with tall many-paned windows set in white sashes, are still the architectural hallmark of the city, although most now serve other commercial purposes. The two-mile-long Quequechan River, named by the Indians "Falling Water," drove the mill turbines. And as in so many of New England's small industrial cities, the men and women who worked in the mills were the immigrants who poured into America at the turn of the century. To Fall River, in a flood of hope, came Portuguese, French Canadians, Irish, Italians and Slavs. And from the distant Middle East, from what was then part of the Ottoman Empire, also came a few Turks and Egyptians, larger numbers of Syrians and—especially—Lebanese.

Last summer, as their special contribution to their city's local celebration of America's Bicentennial, Fall River's Lebanese-American Community—today about 500 families—organized a festival attended by some 6,000 people. The festival featured many of the old-country ceremonies and customs preserved privately in their homes, clubs and churches.

Renée Maalouf, the prime mover behind the Bicentennial Festival, explains why. "Because Fall River is an industrial city it does not put much emphasis on culture. But there *is* culture here—in the diverse ethnic traditions of its people.

Our Lebanese culture is part of it, but often remains hidden. And as our young people intermarry with others of French or Irish descent it could even disappear. I thought the Bicentennial was an appropriate time to find out what we still had, and bring it out for everybody to see."

The result was Fall River's "Lebanese Cultural Week," which opened with a mass in the Maronite Church and closed with snaking lines of the *dabkeh* danced to the amplified sound of *'ud* and the *derbakki* drum, played by a band called The Phoenicians in a community college cafeteria. It was a festival sponsored by people who emigrated from Lebanese mountain and seaside villages some 75 years ago, by their sons and daughters, grandchildren and great-grandchildren, many of whom have never visited their mother country, and even by a few new arrivals from the Middle East. Lebanon—then tragically torn by civil strife—was recreated by the Fall River community as it would like to remember her: the land which gave them its religion, its poetry, its music and its tradition of hospitality.

The story of these early Lebanese immigrants is a familiar chapter of American history and the Lebanese-American community in Fall River is, in a way, a microcosm of many of the ethnic groups which helped build the city.

Most of the early immigrants still living fled the Ottoman domination of their homeland early in the 20th century. Most were young men, some still in their teens, who came with their brothers and cousins. One set of brothers was accompanied by an 11-year-old sister whose responsibility it was to sew and cook for them. They planned to stay two years, make a lot of money and return home. Most stayed a lifetime. As children, many had worked the soil of their terraced hillsides growing vegetables and harvesting silkworms from mulberry trees. A few had also worked in the silk mills. They landed at Ellis Island with cards around their necks indicating their names in English letters which they could not read, and pieces of paper in their pockets with the name of a cousin or uncle in Fall River, Massachusetts. After being processed through the labyrinth of immigration regulations, they boarded a Fall River Line steamer which brought them the next day to what was then a cotton textile capital of the world.

The new arrivals went to work in the mills for 12 hours a day, six and one-half days a week, for which they were paid nine dollars. Somehow, most of them sent some of that money home. "As little as they had here, America was Utopia for them," says Jamelle Abdallah, a first-generation Lebanese-American who lives today in a comfortable three-story brick house set on an acre of lawn and flower beds.

Mrs. Abdallah's parents had lived quite differently: her mother and father both settled in tenement flats in the Flint section of town adjacent to the mills—clapboard buildings with bay-windowed front parlors facing the street.

In those days the parlor was kept for Sunday guests and special occasions; it crept into their Arabic vocabulary as *al-front*. They entered the flat through the kitchen, the center of activity for both family and visitors simply because it had a coal-burning stove. The stove provided heat as well as being the facility for cooking and baking.

The ground floor of two of these tenements, both on Jencks Street in the Flint district, served as the immigrants' first churches. The Protestant population arrived somewhat earlier than the Catholic; perhaps because they had come into more contact with the American missionary groups in the Middle East in the late 19th century (See *Aramco World*, November-December, 1969). In 1898, led by a lay minister, they began to meet and the following year they formed the Syrian Protestant Bible Class for their children. The first Maronite Catholics in Fall River could attend the incomprehensible Latin masses in one of the local Roman Catholic churches, but for weddings they would have to travel 80 miles to Lawrence, at the time a woolen textile center, which also employed many new immigrants and which had Maronite priests. But by 1911 they too had a ground-floor church of their own to which they sometimes brought a Maronite priest down from Boston. Many of the first - generation Lebanese - Americans today have baptismal certificates issued from one of the two houses on Jencks Street.

Today, Maronite and Melchite Catholics worship together at St. Anthony of the Desert, the second Maronite church to bear this name. Completed just last year, the brick and wood contemporary church was the scene of a Melchite mass to open the Bicentennial Festival. For the congregation, it was a moment of deep feeling with the palpable presence of past generations when the Stars and Stripes and the Cedar of Lebanon on a red and white background were carried up the aisle.

The Syrian Protestant Church is now merged into the Calvary United Presbyterian Church, which also held services during the festival week.

When "An Evening at Baalbek" was presented in the auditorium of the regional vocational technical high school, the presence of that earlier generation was felt again. The performance was dedicated to Kahlil Gibran, who had visited Fall River to be honored by the Mt. Lebanon Society soon after it opened its headquarters on Quequechan Street in 1925. At the performance, Gibran's prose and poetry were sung or recited in French, English and Arabic. The children had to learn the Arabic words by rote.

Flora Azar dances during "An Evening at Baalbek."

But many of those listening to their effort could remember how, when they were children, their parents performed plays in Arabic, which the first American-born generation understood very well although they resisted speaking it.

"My parents would talk to us in Arabic, but we would answer in English even though we had to attend Arabic classes every day after school," remembers Loretta George, president of the Fall River Chamber of Commerce. Later, in the 1930's and 40's, Loretta George's generation would put on skits between the acts of the Arabic plays. These were comedies about their own people and jokes on themselves, often imitating their elders' inability to speak proper English, mixing "my fish" and *mafeesh* (there isn't any) to the delight of the community of elders struggling to preserve their Arab identity and culture, and of youngsters yearning to lose it.

The Mt. Lebanon Society, where these plays were performed, and the two churches were the focal points of the Flint community. After World War II the society changed its name to the Lebanon-American Society, and for years its headquarters was the scene of Thursday and Sunday night dances, amateur theatricals and weddings. Even today, some 205 male members meet there regularly on the first Thursday of every month, and the 188 women who form the Ladies' Auxiliary meet there on the first Sunday.

There were once several coffee houses in the district too, but one by one they have closed down over the years. The coffee house had been a haven for men, a refuge from the mill and the crowded tenement flat. To recreate them, the women of the community staged a cafe scene at the Bicentennial Festival and served Turkish coffee to visitors. Men in costume played *towleh*, which is backgammon (See *Aramco World*, July-August, 1973), and everyone had a chance to smoke the *narghila* (water pipe), which is still smoked in Fall River homes when guests are entertained.

The Fall River Lebanese-Americans have maintained the close-knit family relationship that is traditional in the Middle East, and Sunday is still set aside for visiting relatives and close friends. One never telephones ahead. Parents today have some difficulty persuading their children to accompany them on a Sunday visit to grandmother but the community has managed better than most ethnic groups to maintain strong family ties.

Over a hundred women cooked for days

Left to right: Organizers recreate a village café at the festival; Loretta George and Renée Maalouf display mezeh *table of typical foods; Abderrahman Tazi, of Morocco, works a brass tray; women of the community sell food they prepared; Ted Smith explains how craftsmen inlay woods and mother-of-pearl.*

to provide Lebanese dishes for the Bicentennial Festival: *kibbeh*, *mujaddara*, *tabbouleh* and other specialties at one long table, and all kinds of desserts and cookies and cakes on another.

At the festival there was also a store selling imported foods provided by Michael Nassiff, who owns the Nasco Import Market. *Baqlawa* sweets on trays, spices, nuts and olives in glass jars, dried legumes in sacks, grape leaves, *tahini* and apricot paste, known as "fruit leather," were for sale. Although many of the Fall River Lebanese-Americans have gone into both the grocery and fruit store business, Nasco is one of the last of several stores which still specialize in the ingredients of Arab cooking for the early immigrants.

There are still three bakeries producing Arab bread, however. Sam Yamin, his wife, Georgette, and their five daughters run one of them, Sam's Bakery on Flint Street, rising long before dawn to mix dough. Three of his daughters have graduated from college and are married, and one is studying journalism, but all of them help out in the bakery on Saturday and Sunday mornings, Sam's busiest time. Their fingers fly as they roll dough and fold meat and spinach pies, and the round loaves of bread are still warm when handed to the waiting customers who start lining up at the counter at seven in the morning.

It was World War II which accelerated the changes in fortunes and outlook of the first- and second-generation Lebanese-Americans living in the Flint district. The immigrants had formed a self-sufficient and inward-looking community as they struggled to raise their families and still send money "home." Many of the same weavers who had worked on five or six machines before World War I were operating 40 by World War II. Edward Abdallah, a retired lieutenant colonel in the U.S. Air Force, remembers taking his father's lunch to the mill. "My mother cooked one main meal for the family for the whole day and I would run home when school let out at 11:30, get something to eat and take my father's pail to him, usually something like lentil soup

A popular table features Lebanese sweets and desserts.

and a kind of Lebanese goulash made from lamb, rice and peas. The mill sold milk to the workers. But nine times out of ten, I remember this well, he would save the milk for me and I would drink it walking back to school. Going into that mill was like walking into an oven. It was 110 degrees in summer! And the steam . . . which was to keep the threads from snapping! And the noise . . . the vibration of those looms! My generation, the first-generation Americans, vowed we would never go to work in the mills. And 99 percent of us did not, even when things were dire."

The first generation went to work as young boys and girls to help support their families, most leaving school in the eighth grade. By the 1940's some were going to high school, but practically no one went to college. If one did, it was to night school after working in stores, offices, bowling alleys or the small businesses of parents who managed to get out of the mills.

It was hard. The decline of Fall River's textile industry coincided with the Great Depression. The city ran a welfare program. "The most horrible thing for a Lebanese," says Edward Abdallah, "was to go on welfare. But some had to. You got $3 to buy a load of coal, some flour and some corn. And you went down to the welfare office to get it."

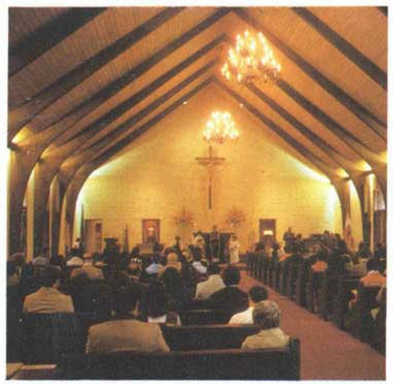
In July 1941, when he was working as a produce manager for the Atlantic & Pacific Tea Company, Ed was the first young man in the Lebanese community to be drafted. He was conscripted for a year, but when America went to war a few months later, he passed the aviation cadet exam, went to flying school and stayed in the U.S. Air Force for 23 years, stationed part of the time overseas. Many young men in the community enlisted. Some of them died.

According to Joseph Azar, a civil engineer for the Commonwealth of Massachusetts, the war spurred the awakening of the Flint community. "We had kept together, and we didn't assimilate easily. Our parents didn't speak good English and we were sometimes called names. But when we went into the service a lot of us became officers, commissioned and noncommissioned, and we saw that we were on a par with people from other ethnic backgrounds. We had a close relationship with each other, we still have, which is good. But we saw then that we held each other back, and those that went out on their own did very well."

One who did well was William Kalif, now a vice president of the Morton Salt Company. He was one of the youngsters who did not get away with answering his parents in English and as a result learned fluent Arabic. During the war, as a major in the Army he was part of a military mission to Saudi Arabia and, acting as interpreter, took part in many meetings with the famous King 'Abd al-'Aziz.

Military service entitled many of the Fall River community to a free college education. Most obtained degrees by going to night school, and the first American-born generation has entered the professions—medicine, law, education—as well as going into business and industry. Today the community includes two millionaires.

The American Lebanese Veterans Association, formed after World War II, is presently another vital force in the community. Both the Veterans and



Maronite and Melchite Catholics share a new church.

Lebanese-American Associations sponsor numerous *haflis*, which are indoor celebrations, and *mahrajans*, which are outdoor picnics. These may be fund-raising events or just for fun. It has been these occasions, before the Bicentennial Festival displayed their heritage to the Fall River public, that the community enjoyed its traditional music, dances and food.

The other events which have traditionally brought together almost the entire Lebanese-American community are weddings and bridal showers. At first, wedding receptions were held in *al-front*, the parlor in the tenement flats, and included family and very close friends to eat, drink, sing and dance. Although four or five people might link arms and dance the *dabkeh* in even a crowded tenement flat, solo dancing predominated. At the performance of "An Evening at Baalbek," Flora Azar of nearby New Bedford danced a solo traditionally danced by women on festive occasions, usually weddings, in Lebanese villages, using expressive hand movements symbolizing love, forgiveness and acceptance, which she first danced at the age of seven at the wedding of a cousin. She had been taught by her older sister who was in turn taught by her mother who emigrated from Lebanon.

At the festival, the sword dance was performed by Fred Hajjar, a 58-year-old grandfather who learned it from his father and, having only daughters himself, has started to teach it to his oldest grandson, aged 14. "I don't know how I do it," he says. "I do it from my heart. It is in my blood. For my grandson I perform it as slow as I can, then hand him a sword and make him follow me. You have to be artistic about it. You have to give signals gracefully to your partner. Both dancers are leaping and jumping and swinging the sword very fast. You have to be on guard or you can get hurt. But it is in his blood too. He'll be doing it by Christmas." At every community celebration there used to be several sword dancers but now there are only two in Fall River—until Fred Hajjar's grandson has mastered the art.

On most occasions Fred brings a handkerchief. The handkerchief, twirled high above the head, is a staple of Lebanese dancing, used principally to signal to one's partner. The *dabkeh* is danced whenever there is room enough for three or 30 or more to hold hands and follow a leader flourishing the handkerchief. At the festival it was performed on stage by the Folklorettes, a troupe of young girls. An even more elaborate variation, the *bedawiya*, a dance derived from traditional Bedouin dancing, was performed by Flora Azar's professional troupe. But wherever there was someone playing the *'ud* and beating the *derbakki* there were lines of dancers winding through the crowd at the festival.

A lighthearted couple makes dancing look like fun.

In one way the Fall River Lebanese community closely resembles other ethnic communities throughout the United States. So often the first American-born generations, in a desire to be truly American, reject much of their heritage. Only with time do they feel secure, and Fall River's Lebanese-Americans are now rediscovering this heritage as a cultural mine from which they can dig treasures past generations set aside for the tastes, attitudes and behavior of the new country. Today, no longer ashamed of the old country's folk arts and folkways, they proudly put them on display at the festival.

Out of attics and living rooms came furniture, utensils and handwork. The writing desk and chair of inlaid woods and mother-of-pearl did not come to America with Charles Salamy, but were purchased on a trip back to Lebanon in 1932. Ted Smith, whose name was Americanized by his grandfather from Haddad, meaning "ironsmith," explained to visitors how Lebanese craftsmen made a box of olive wood inlaid with assorted other woods in natural colors. The brass braziers, decorated water pipes, the copper plates inlaid with silver, the backgammon boards, the pottery, and a set of Jezzine flatware of bone and brass inlaid with stones have all been purchased by those who traveled back to Lebanon in recent years, whereas the needlework—embroidery, tatting and tapestry—were done by women in the Fall River community.

Most of the community has moved out of the Flint district now, up the hill into houses with lawns and gardens in the East End, where both new churches stand. However, the American Lebanese Veterans Association remains on Flint Street and the Lebanese-American Association is still on the corner of Quequechan and Lebanon streets—in sight of the mills where their forebears started to earn the wages they hoped would return them to Lebanon as rich men. Instead, in a metaphor much used by their descendants today, "they tilled the soil and planted the seeds now being harvested by their children."

John Monsour, who was a lieutenant inspector in the Massachusetts State Police and who also served seven years with the U.S. State Department, says, "My father came to Fall River in 1902 and died in 1967. After 65 years here he didn't know 65 words of English. But he became a citizen and he loved this country. When I was in the State Department stationed for a while in Beirut, where I had a beautiful apartment, I brought my mother and father over for a visit. He had numerous cousins and nieces and nephews in Lebanon, and she had a sister and four brothers there, but you know, after a few months they came to me and said: 'We want to go home.' It's true. America was home."

Kahlil Gibran wrote in *The Mirror of the Soul:* "Here I am, a youth, a young tree whose roots were plucked from the hills of Lebanon, yet I am deeply rooted here, and I am willing to be fruitful." No one will deny that this describes the Fall River Lebanese community after three-quarters of a century in America.

Katrina Thomas, whose photographs appear with three articles and on the cover of this issue, lives in New York and is working on a book about America's diverse ethnic heritage.

Three Middle Eastern states helped America celebrate its

Centennial in Philadelphia

WRITTEN BY KENNETH J. PERKINS

The United States observed its 1976 Bicentennial with a remarkable—some say endless—variety of celebrations, most organized by local communities. But 100 years ago, the nation's *Centennial* festivities included, in addition to local pageants, a major national attraction—the United States International Exhibition—at which more than 40 foreign countries participated. Among them were three Middle Eastern states—Tunisia, Egypt and the Ottoman Empire—all places which, to most Americans of 1876, were colorful, exotic and very far away.

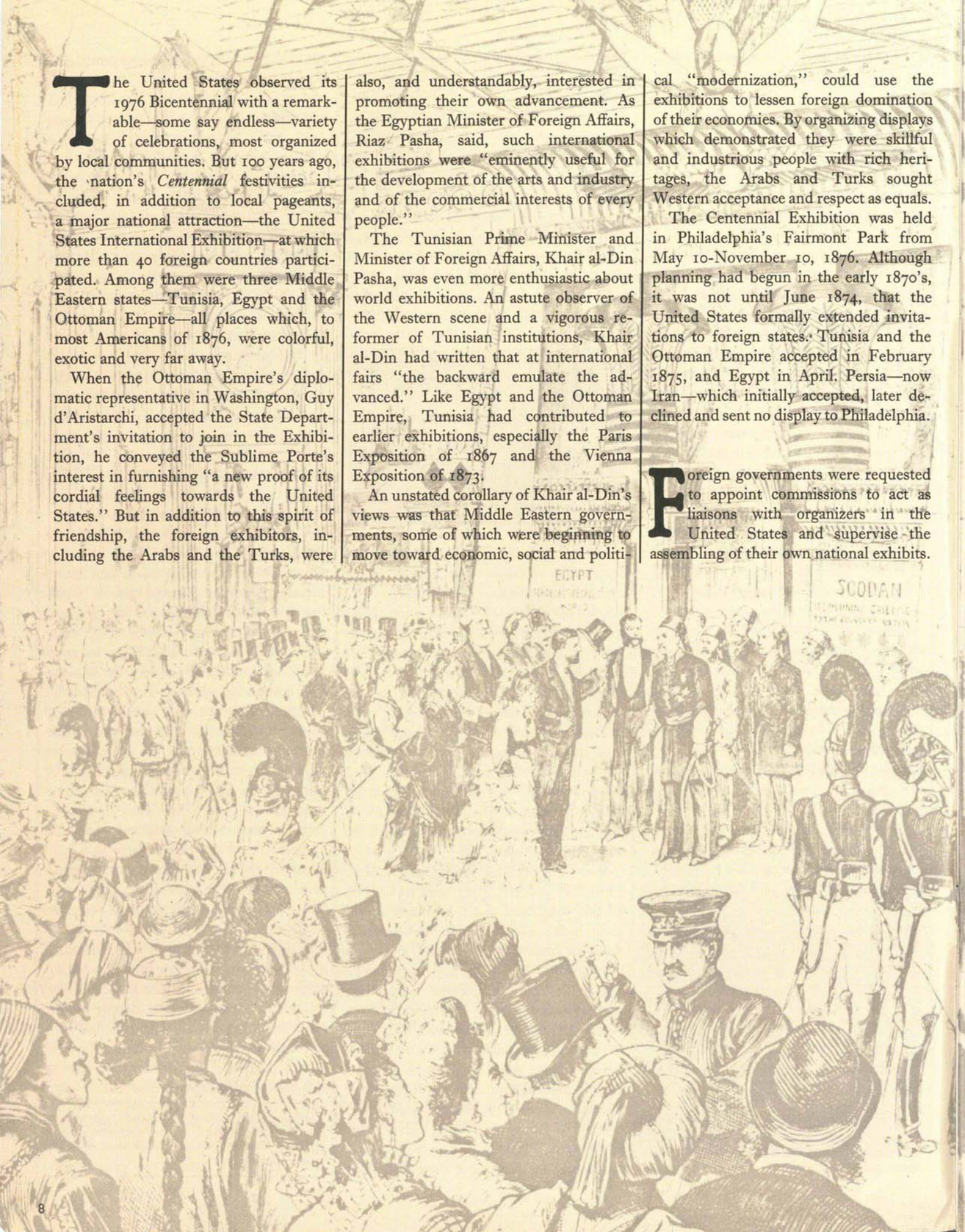
When the Ottoman Empire's diplomatic representative in Washington, Guy d'Aristarchi, accepted the State Department's invitation to join in the Exhibition, he conveyed the Sublime Porte's interest in furnishing "a new proof of its cordial feelings towards the United States." But in addition to this spirit of friendship, the foreign exhibitors, including the Arabs and the Turks, were also, and understandably, interested in promoting their own advancement. As the Egyptian Minister of Foreign Affairs, Riaz Pasha, said, such international exhibitions were "eminently useful for the development of the arts and industry and of the commercial interests of every people."

The Tunisian Prime Minister and Minister of Foreign Affairs, Khair al-Din Pasha, was even more enthusiastic about world exhibitions. An astute observer of the Western scene and a vigorous reformer of Tunisian institutions, Khair al-Din had written that at international fairs "the backward emulate the advanced." Like Egypt and the Ottoman Empire, Tunisia had contributed to earlier exhibitions, especially the Paris Exposition of 1867 and the Vienna Exposition of 1873.

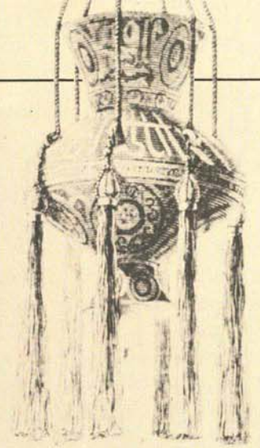
An unstated corollary of Khair al-Din's views was that Middle Eastern governments, some of which were beginning to move toward economic, social and political "modernization," could use the exhibitions to lessen foreign domination of their economies. By organizing displays which demonstrated they were skillful and industrious people with rich heritages, the Arabs and Turks sought Western acceptance and respect as equals.

The Centennial Exhibition was held in Philadelphia's Fairmont Park from May 10-November 10, 1876. Although planning had begun in the early 1870's, it was not until June 1874, that the United States formally extended invitations to foreign states. Tunisia and the Ottoman Empire accepted in February 1875, and Egypt in April. Persia—now Iran—which initially accepted, later declined and sent no display to Philadelphia.

Foreign governments were requested to appoint commissions to act as liaisons with organizers in the United States and supervise the assembling of their own national exhibits.



Engravings from *Frank Leslie's Illustrated Historical Register of the Centennial Exposition of* 1876 and from *Harper's Weekly*.



The Egyptian Government named Prince Muhammad Tewfiq, the son of Khedive Isma'il, president of its 11-member commission. Its most active member, however, was Henri Brugsch, a prominent Egyptologist who had formed the Egyptian display at Vienna, and only Brugsch, his brother Emile and three minor officials traveled to Philadelphia. Khedive Isma'il appropriated $60,000 for the creation of the Egyptian exhibit, while reserving another $5,000 for the expenses of the commissioners: $300 for travel and an $8 per diem allowance while they were in the United States.

By late summer, 1875, Brugsch and his associates had collected 140 cases of material for the exhibit, most provided by the Egyptian Government. Only 10 private contributors supplemented items supplied by the Ministries of War and Public Instruction and the National Museum. Goods shipped from Alexandria began arriving in Philadelphia on January 18, and by the opening of the Exhibition totaled 274 packages weighing 68,640 pounds.

The much smaller Tunisian commission consisted only of Sidi Hussain, who was Minister of Instruction and Public Works and had visited the United States in 1867, and George Heap, the American consul in Tunis. At first Heap thought that the Tunisians would not create a very original exhibit, sending "the same articles to Philadelphia as were sent to the Vienna Exhibition." The enthusiasm of his co-commissioner, Sidi Hussain, and of the Prime Minister soon changed the consul's view, however, and Heap even agreed to act as the Tunisian representative in Philadelphia. The Tunisian exhibit, comprising 58 packages and weighing 14,440 pounds, did not leave North Africa until February 8, 1876, reaching Fairmount Park on May 4, less than a week before the fair opened.

The Ottoman commission encountered serious difficulties in organizing its display, most of them stemming from the Empire's size and its inadequate transportation and communications system. Collecting and preparing inventories of goods from the Balkans, Anatolia and the Arab provinces in Istanbul was a time-consuming process. In August 1875, d'Aristarchi, the Ottoman diplomat, writing from Newport, Rhode Island, where he was vacationing, promised the Centennial Commission he would try to hurry things up, although he doubted, under the circumstances, that he could. He couldn't, and the Ottoman display was not ready on May 10, the opening day. The Ottoman Empire's 121 packages weighing 25,004 pounds continued to trickle into the fairgrounds until the end of the month.

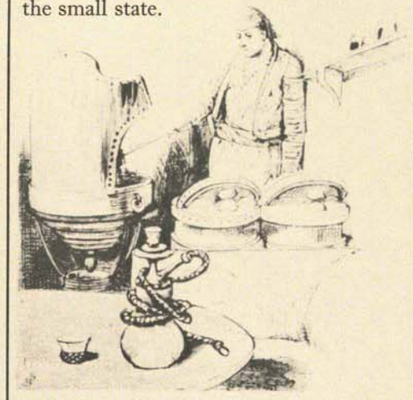
The contributions of Tunisia, Egypt and the Ottoman Empire, along with other foreign and domestic displays were housed in the Exhibition's main building, which sprawled over 20 acres. Although Egypt had the most space, more than 5,000 square feet, the Ottomans boasted many more elements in their display, with over 1,600 individuals or firms taking advantage of the fair to publicize their wares. Indeed, only the British Empire and the United States sent more exhibitors.

Centennial Commission officials separated the foreign participants into geographical groups whose exhibits were then clustered in specific parts of the hall. This practice produced a particularly pleasant side effect. The smell of attar of rose, incense, scented woods, spices, coffee and Turkish tobacco all mingled around the Middle Eastern displays, providing visitors with "delicious whiffs of . . . the sweet, stimulating perfume which must be the breath of the Orient . . . a faint, intoxicating aroma."

The facade of the Egyptian section imitated that of an ancient temple replete with lotus-leaf capitals, while the exterior of the Tunisian exhibit copied a Moorish villa. Both Egypt and Tunisia capitalized on their ancient heritages by showing antiquities from the Pharaonic and Carthaginian eras—periods of Mediterranean history more familiar to many of their American visitors than the 19th century. Egypt chose as its motto for the Exhibition "The Oldest People to the Youngest," and in keeping with the theme displayed statuary dating from 1000 B.C. and photographs of ancient sites. From the ruins of Carthage the Tunisian Government sent a life-sized mosaic of a lion attacking a horse, which one commentator described as the best artwork of the entire Exhibition. It was by far the most popular feature in the Tunisian section and attracted continuous crowds, some of whom tried to loosen tiles for souvenirs. Eventually Heap had to cover the mosaic with a wire screen to discourage vandalism.

All three Middle Eastern exhibitors presented displays of textiles, elaborate metalwork, inlaid furnishings, pottery, exquisite jewelry and crafts typical of the region. A carefully arranged portion of the Egyptian exhibit presented an extensive collection of cotton samples packed in small rolls, each marked with its place of origin, grower and sale price. A large library of books used by the Ministry of Public Instruction and the Polytechnic School, including volumes for the blind, illustrated the strides being made in education in the Nile Valley.

When the Tunisian display opened to the public in late May, it offered visitors an insight into everyday life at several levels. A small alcove within the Tunisian area contained furnishings typical of an upper-class Tunisian drawing room, including a solid silver coffee service and 10 small china cups. Outside were pitched two Bedouin tents. A large collection of ornate firearms constituted perhaps the most impressive aspect of the Tunisian display. One tourist noted that "it would be no easy matter to find an American shop in which such highly and elaborately finished guns could be made." As was intended, the collection conveyed to visitors a sense of sophistication they would not previously have attributed to the small state.



Until early July, hanging Oriental carpets screened the area reserved for the Ottoman Empire from public view. Behind them laborers continued to prepare the display. Some early visitors grumbled at not being able to see everything in the main building, but the exhibit proved not very different from those of its Middle Eastern neighbors. Rugs and carpets, textiles, leather goods and metalwork predominated and were all on sale at reasonable prices. Not to be outdone by Egypt's cotton samples, the Ottomans produced a sizeable sampling of Macedonian tobacco. In an effort to stress the multinational character of the Empire and remind the West that the Muslim government ruled its minorities with tolerance, the exhibit included religious articles from Christian Arab shrines in Palestine.

Every item on display in Philadelphia fell into one of 36 categories, each of which was evaluated by a team of judges. Those of noteworthy quality received a diploma and bronze medal. A total of 13,104 awards were made, with the Ottoman Empire winning 86, Egypt 34 and Tunisia 9. Each country also won a commendation from the authorities for its exhibit as a whole.

Most of the awards came in the crafts which dominated the Middle Eastern displays, but the wide range of commodities in which Ottoman, Egyptian and Tunisian competitors excelled reveals the depth of the three displays. Egyptian sugar, and olive oil from throughout the Ottoman Mediterranean gained the judges' praise. Both the Ottoman Government and the National Museum in Cairo exhibited specimens of indigenous fruits, plants, seeds and woods which garnered accolades, as did Syrian gallnuts, pistachios and gum arabic. Cotton and linen cloth from Yemen and silks and wools from Egypt and Greater Syria captured prizes, and several Ottoman provinces combined to present a display of silk cocoons "of exceptional merit." Carpet merchants and manufacturers, including some European-owned firms, were commended for their floor coverings and wall hangings.

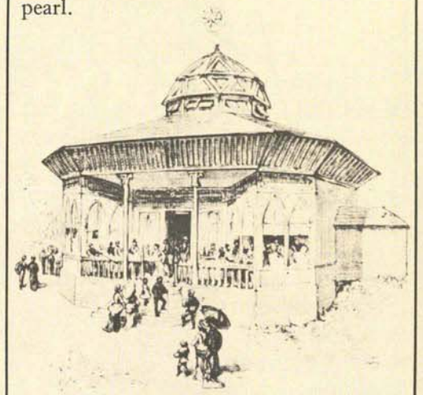
Despite praising them for their beauty, critics noted that Tunisian and Egyptian weapons, as well as saddles and trappings, lacked practicality and that the Middle Eastern participants entered few exhibits in the mechanical or technical categories.

In the plastic and graphic arts category, however, some early examples of Middle Eastern photography did win some attention. A group of photographs of Egyptian landscapes and ancient monuments and another of Syrian costumes supplied by two Beirut merchants were particularly interesting. Another photographer submitted a series of plates which illustrated the development of the main trends of Ottoman architecture.

The photographs gave a visual framework for the often unfamiliar objects in the Middle Eastern exhibits, but several popular shops scattered around the fairgrounds offered visitors a personal taste of Turkish and Arab life. Prominent among these were Turkish and Tunisian cafés, which sold Middle Eastern refreshments and souvenirs, "bazaars" featuring handicrafts from Syria and Palestine, an Algerian pavilion and a Moroccan villa. Here visitors met Tunisians, Egyptians and "Turks"—who were almost invariably Balkan or Syrian nationals because of their greater familiarity with Western languages—and could observe some of the customs of the East in an environment which could be duplicated only by actual travel.

The Tunisian café served Arab coffee for 25 cents a cup and sold jewelry and trinkets, but its main attraction was the entertainment it provided: three musicians and a dancing girl. Almost as popular was the café's Turkish competitor, which critics hailed as a "very fair reproduction of a café in Smyrna or Pera." Operated by two European businessmen from Istanbul named Ludovic and Vallauri, the café—built and furnished at a cost of $5,000—boasted authentic waiters brought from Turkey and a veranda furnished with divans and small circular tables. The coffee house was primarily for men—another measure of its authenticity—but an adjoining waiting room accommodated their female companions. In two corners of the octagonal interior stood an array of chibouks and water pipes, with both tobacco and coffee available for 15 cents. The adjacent bazaar sold clothing, swords, carpets and, of course, the two types of pipes, which were popular souvenirs for smokers who had visited the café.

The Bethlehem, Jerusalem and Palestine bazaars, staffed by Syrian Christians, were devoted almost exclusively to the sale of Christian religious articles from the Holy Land. Their most popular wares were polished olive wood crucifixes from Bethlehem and rosary beads and other mementoes manufactured of mother-of-pearl.



Of all the Middle Eastern buildings on the grounds, only the privately-sponsored so-called Moorish kiosk surpassed the Turkish café in authenticity. The structure had been shipped to Philadelphia piece by piece from the "realm of the Saracen" by Dr. Max Schmidt, a scientist working in Morocco. Its main feature was a display of Moroccan arts and crafts managed by a native of Tangiers. Jewelry and weapons were on sale and two rooms, a bedroom and a small parlor, both decorated in North African style, were open to visitors. The less ornate Algerian pavilion was similar.

When the Exhibition formally ended on November 10, the foreign commissions began the task of removing unsold items. Much of the material on display in Philadelphia never returned to the Middle East. Several American museums purchased some Egyptian and Tunisian antiquities and, as expected, private individuals bought many pieces. Exhibitors sometimes exchanged goods, with Tunisia and Mexico exchanging seedlings and the Georgia Department of Agriculture asking Heap for samples of Tunisian field and garden seeds which might be utilized in that state. The Bey of Tunis' display of minerals impressed a United States Naval Academy instructor, who inquired about obtaining part of it for the academy's museum, but that particular exhibit was sent back to Tunisia.

Things which the Tunisians did not want, but which had been neither sold nor given away, were disposed of in a New York City auction marked by "general and spirited" bidding on December 2. Among those in attendance were Lewis Tiffany and other members of New York high society. Carpets, draperies and table coverings brought prices ranging from $6 to $65, while a host of weapons, including an antique Turkish sabre and a Persian spear, sold cheaply, as did numerous copper and silver vessels. Overall, however, Tunisian officials viewed the auction, which produced a total of $4,525.07, as "very satisfactory."

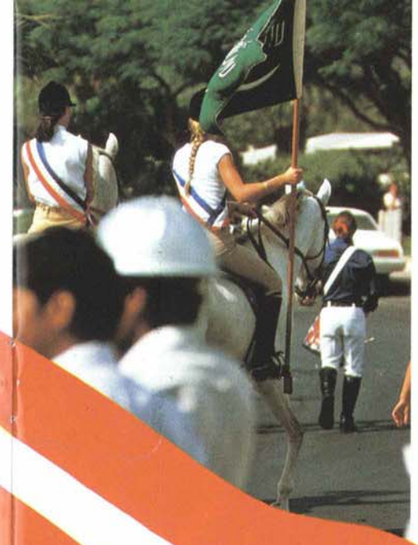
Many visitors came away from the Middle Eastern displays with their provincial view of these countries as strange lands inhabited by strange people unchanged. As one Ohio tourist said, he hurried through the Tunisian display because "there is not much to be learned here"—an American attitude toward the Middle East which was to persist, in some cases, right up to the time of the Bicentennial.

But in the final analysis, the Centennial Exhibition was a success for the Middle Eastern countries involved. While they did not secure any official United States Government support or sympathy in their disputes with the Europeans or even completely convince the American public that they were not "backward," they at least succeeded in alerting a great many ordinary American citizens who were otherwise oblivious to it, of their existence. And above all, the Ottoman, Tunisian and Egyptian presence in Philadelphia in the summer of 1876 served as an important reminder to a United States beginning its second century—and soon to involve itself more actively in world affairs—that there is a great deal more to the world than Europe and North America.

Kenneth J. Perkins is an assistant professor of history at the University of South Carolina.

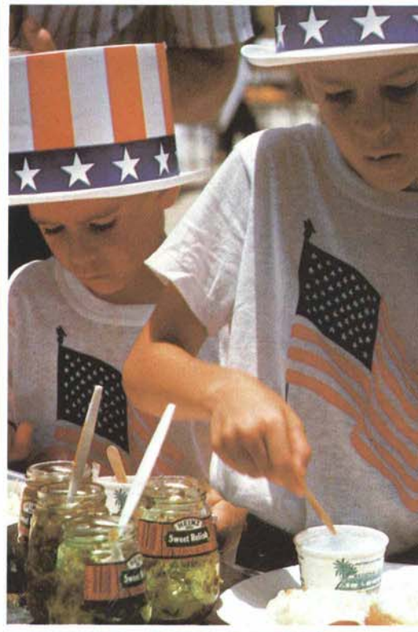
Aramco's American employees celebrate the...

Bicentennial in the Eastern Province

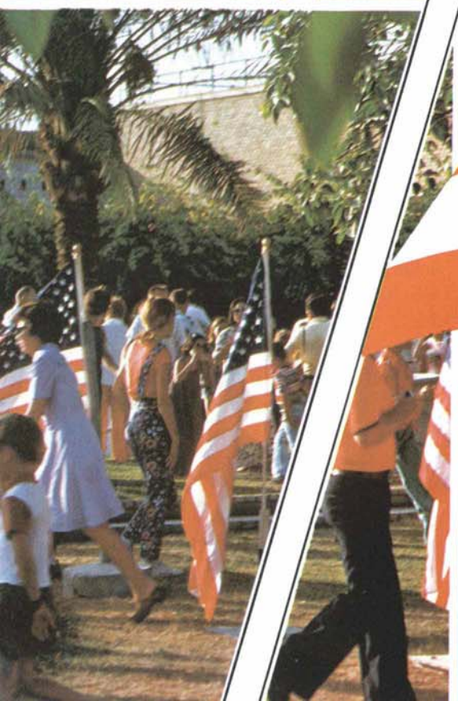


Amid the excitement of America's prolonged Bicentennial celebration the faint Fourth of July cheers from a corner of Arabia last summer went unnoticed and unheard—the cheers from Aramco's small American outposts in towns called Dhahran, Abqaiq and Ras Tanura.

Like many expatriates in recent years, Aramco's Americans have modified the once strident patriotism that in simpler times often marked celebrations of national holidays. But last March, as Americans everywhere began to respond to the mounting Bicentennial fervor in the United States, an Aramco employees' group began to wonder if they too shouldn't do something. Bicentennials, after all, don't come along all that often, do they? And surely Saudi Arabia, Aramco's host for nearly 40 years—and now a corporate partner in the company — wouldn't mind, would it?



PHOTOGRAPHED BY
BURNETT H. MOODY AND S. M. AMIN



No, they found, Saudi Arabia, now host to more than 1,700 American employees participating in the Kingdom's vast industrialization programs, wouldn't mind at all. In fact the Kingdom had already sponsored a large advertisement in *The New York Times* offering congratulations to the United States. So planning began—the planning that would produce, on July 4, 1976, a celebration that for a few days linked the three small communities in the Eastern Province of Saudi Arabia with cities and towns throughout the United States of America.

In the forefront in the communities' planning was the employee group's treasurer, Ronald C. Langan, who became Bicentennial chairman and the liaison man with the various organizations that contributed so much to the celebration and the

various Aramco departments that provided logistical and financial assistance. "Compared to something like the 'Tall Ships' day in New York," Mr. Langan said later, "our celebration may have seemed small. But it took a lot of work and it was a great success."

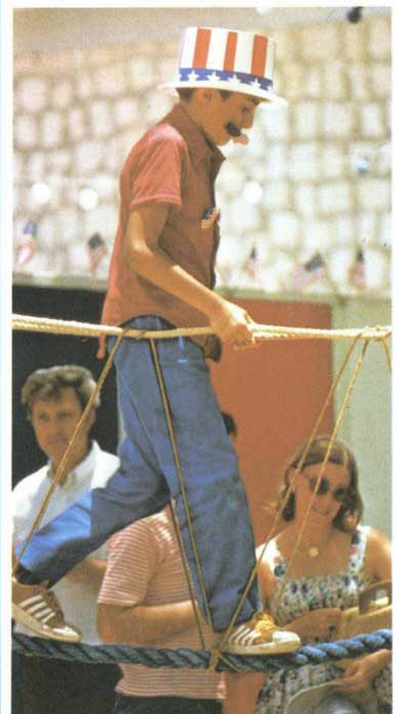
It was indeed. From the moment

the curtain rose on the Dhahran theater stage and a community choral and brass group broke into a program of stirring music there was no doubt that community enthusiasm had reached an unusual pitch. The cheers were loud, the laughter spontaneous and the enthusiasm contagious. As one man put it, "I haven't enjoyed a Fourth of July like this since I was a kid back in Kansas."

Back in Kansas, of course, there was no Arabian Gulf just over the back fence. But there were similarities—such as the Fourth of July parade. In Dhahran the parade stepped off early on the morning of the *first* of July, but it was much the same otherwise: drums beating, trumpets blaring, flags flapping and the marchers moving smartly past the lines of spectators. The outing at the flag-draped recreation area was similar too: booths, games, contests, and crowds of people—5,000 according to one estimate.

They had to be fed, naturally, so the Bicentennial committee fed them: from stocks totalling 10,000 hot dogs, 5,000 hamburgers, 6,000 slices of watermelon and 5,000 cups of ice cream, all ordered months before. In addition there were gallons of soda, cartons of Popsicles and tubs of homemade cotton candy laboriously whipped up by the perspiring parents and laughing teenagers who manned the booths.

As at any outing there were games and contests too. Kids of all ages and many nationalities walked a tightrope. Lithe young girls and



boys tried to set records in the pool. Young tennis stars exchanged serves and lobs and nearly everyone had a go at shooting baskets or knocking bottles off a ledge with baseballs. There were also softball games, displays of art and a band concert.

At Abqaiq and Ras Tanura, the other two Aramco communities, there were similar festivities in similar settings and in all three places there were special events. One was a Bicentennial film. Another was the wildly heralded appearance of rock star B. J. Thomas.

For those who put it together, of course, and those who worked in the hot sun to make it go, it was an exhausting as well as exhilarating day. But they didn't really mind. After all, Bicentennials don't come along all that often, do they?

SPACE-AGE IMMIGRANT

WRITTEN BY BRAINERD S. BATES PHOTOGRAPHED BY KATRINA THOMAS

Farouk El-Baz is an Egyptian-born American geologist who knows both sides of the moon!

On July 17, 1975, when spacecraft from America and the Soviet Union joined together 138 miles above the earth, news stories around the world focused on the immensely complex technical feat of docking the modules and the implications of such successful coordination and cooperation by the two rival super powers. But almost completely ignored in press coverage of the Apollo-Soyuz mission was the collateral purpose of those July orbits.

As they circled earth together the American and Russian spacemen were also observing and photographing the scenery below, both for "science" and for the practical benefit of present and future inhabitants of the lands they were passing over. Since this territory included very specifically the Middle East, it was propitious that the mission's Earth Observation and Photography Experiment—as this phase of the project was officially designated—came under the direction of Dr. Farouk El-Baz, a young geology-trained space scientist whose Egyptian origins gave him a more than routine professional interest in the Middle Eastern portion of the Apollo-Soyuz findings.

Though vast distances separate the Nile Delta town of Zagazig and a valley on the moon known as Hadley Rille, both places have played key roles in the life and career of Dr. El-Baz. The town is where he was born 38 years ago; the rille is the spot on the moon which, working in Washington, D.C. in his capacity as supervisor of Lunar Science Planning, El-Baz had the biggest voice in selecting as the target area for a lunar landing by Apollo 15.

The experience which qualified Dr. El-Baz for such responsibility was not wasted after the successful series of moon landings came to an end. During six successive visits to Earth's only natural satellite, teams of astronauts have brought back about 880 pounds of lunar rock and soil and nearly 20,000 photographs. Each item in this treasure trove had to be sorted out, analyzed and catalogued, a gargantuan task which Dr. El-Baz largely coordinated. Craters and other prominent geographical features on the surface of the moon are being named for individuals out of the past who have made notable contributions to human knowledge, particularly along scientific lines. As a member of the lunar-nomenclature committee, El-Baz has been in a position to have a number of achievers from the Arab world memorialized in this manner; among them, Ibn Yunus, al-Battani and al-Biruni, innovative thinkers in the fields of both geography and astronomy; Omar Khayyam, an eminent astronomer as well as a poet, and al-Khwarizmi, the mathematician who invented algebra.

In recent years two events in Farouk El-Baz's life have both accelerated the momentum of his career and significantly altered its course. In January 1973, he became research director of the Smithsonian Institution's Center of Earth and Planetary Studies, now based in Washington's impressive new National Air and Space Museum on the Mall. About the same time plans were being formulated for the international rendezvous in space between the USA and the USSR—the Apollo-Soyuz mission.

Every phase of that 1975 joint mission, as it turned out, heavily involved the Smithsonian's Egyptian-born space geologist as well, keeping him more than fully occupied during the preparation stage, while the spacemen were in orbit, and long afterwards—right up until today, in fact. Dr. El-Baz describes his role in the project as "principal investigator for visual observation and photography for the mission, looking at the earth as a whole, its geological features, matters of interest in the fields of oceanography, hydrology, meteorology and everything, really, relative to the earth."

Dr. El-Baz meets President Anwar Sadat of Egypt.

When Farouk El-Baz talks about his work he often characterizes it as looking at the "big picture." And although this term can come out sounding like a cliché, when El-Baz describes his activities, it seems wholly justified. Few other individuals are so well acquainted, to give just one example, with every geographical feature on both sides of the moon. Now the focus of his attention has come down to Earth. He has been scanning this planet both as an entity and as thousands of component parts. He does it by means of countless debriefings of astronauts who have viewed the earth from their unique vantage points and by knowledgeable referral to stacks of aerial photographs they have taken of broader stretches of the earth's surface than have ever been seen before through man-made viewfinders.

As far back as the Gemini space-mission days it was confirmed that while photographs taken by the astronauts are valuable permanent records, they are no substitute for personal sightings while the observers themselves are over the spot. Man's eyes are sensitive to subtle variations of color and he is able to transmit exactly what he sees from his eyes to his brain with great speed. And astronauts can instantly relay such information to interested parties on the ground while they themselves are selecting targets to photograph.

A long-time proponent of the photography - *cum* - observation school of gathering surface information from outer space, Farouk El-Baz recognizes that astronauts are, after all, primarily superb fliers, with no intrinsic knowledge of geography and geology. To become competent observers and know precisely what and how to photograph ground features earth-bound scientists are curious about, astronauts have to be trained. This was one of the many places in the Apollo-Soyuz mission where Dr. El-Baz fitted in so circumstantially.

Astronauts and their backups assigned to the program started this phase of training a year before the launch date; like every other aspect of the mission, much thought and planning went into this ingredient. It consisted of about 60 hours of formal classroom instruction in such pertinent fields as geology, oceanography, hydrology and meteorology. Dr. El-Baz, a leading designer of the course, was also the principal lecturer. In addition, El-Baz accompanied his astronaut/students on small planes all around the coastal rim of the United States to point out from low altitudes the kinds of surface features they would likely be encountering while aloft and give the men practice in spotting target areas and describing them.

Besides carrying out the main event of the mission—the hook-up—Apollo-Soyuz astronauts concentrated their attention on two separate components of Earth topography:

- About one-sixth of the world's land surface is covered by desert. For good and obvious reasons, this substantial chunk of territory has received far less attention from earth scientists than other areas of similar proportions. The Apollo-Soyuz orbits brought back sufficient research material on deserts to keep from 45 to 60 participating scientists around the world, all tied in with Dr. El-Baz in Washington, busy for years to come.
- It is known by people who specialize in such esoteric matters that the Red Sea is widening, albeit ever so slightly, each year and that the Persian/Arabian Gulf is becoming narrower by a similar amount. Until the Apollo-Soyuz mission took place it had been generally assumed that the entire Arabian Peninsula, which separates these bodies of briny water, was slowly moving in a straightforward easterly direction. Probably not so, newest investigations indicate. The Arabian Peninsula more likely is *rotating*.

To understand what is happening to the Red Sea and the Gulf it is essential to realize that the entire sand-topped Arabian Peninsula sits on one mammoth unbroken mass of rock, which geologists call a *plate*, extending into the earth sometimes as much as 50 miles. Because of the earth's heat that far down, this solid plate floats on rock that has a semi-molten consistency. Surrounding the Arabian Peninsula block to the east, north and west is a much bigger plate, resting on what is apparently a far more stable foundation. This enormous block supports such lands we know of as Iran, India, Russia and Europe, and is called the Eurasian Plate.

The smaller plate on which the Arabian Peninsula sits is bounded, east and west, by fractures, linear breaks in the earth's crust. One fracture lies somewhat east of the Gulf, in western Iran. The bigger and more significant fracture, which is still expanding, runs down the middle of the Red Sea.

A specific objective of the Apollo-Soyuz astronauts was to provide research data for studies of two of Earth's major faults. Orbiting over the U.S. West, they targeted in on California's notorious San Andreas Fault. While over the Eastern Hemisphere they were asked to describe via an air-to-ground communications system and to record on film the Arabian Peninsula fracture zone, which geologists now call the Red Sea and Levantine Rift.

As it continues northward, the Red Sea fracture line forks, the western branch to form the Gulf of Suez. The other fracture line, accounting for the presence of the Gulf of Aqaba, continues on in a northerly direction. A glance at any map of lands fronting on the eastern Mediterranean reveals that three lesser bodies of water in the region stand more or less in a row.

ALL IN A FAMILY.

Farouk is the fourth in line of nine talented El-Baz brothers and sisters. The eldest, Muhammad, is a general in the Egyptian Army. Next is sister Dr. Osama El-Baz, holder of a doctorate in International Relations from Harvard Law School, who works with the Egyptian Foreign Ministry in Cairo. Brother Esam is a colonel in the artillery branch of the Egyptian military and sister Laila, a Home Economics major in college, is married to a military judge. Another sister, Soraya, teaches high-school chemistry in Riyadh, where her husband is employed by the Public Works Administration in the Saudi Arabian Government. Farouk's youngest married sister, Safa, is a medical doctor now in residency in New York City. Hazim, a graduate in aeronautical engineering, is following brother Farouk's footsteps by seeking his master's at the Missouri School of Mines. And the youngest, Nabil, plans a career in business administration when he completes his required military service.

The father of this brood of achievers was a "relatively poor" teacher of religion and Arabic, undogmatic but fiercely ambitious for his children, who gave each of the older ones unstinting aid in their homework. It was not long before the older children, as is the custom in Arab families, were tutoring the younger ones and taking enormous pride in their scholastic achievements. Farouk remembers well how his father, a graduate of al-Azhar University and a very devout man, would often say, "I wish that God will help me get at least one of my boys through high school."

Farouk's mother married in her early teens. With her husband's help she taught herself the rudiments of reading and writing after her older children were half grown. But what the senior Mrs. El-Baz still lacks in formal education she more than compensates for, according to son Farouk, with "fantastic common sense and native intelligence."

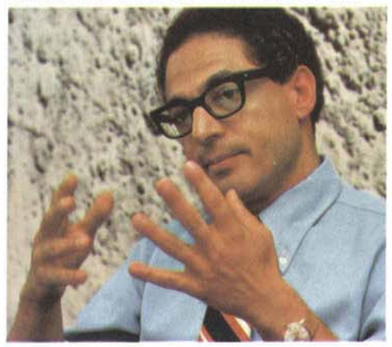
In 1972, after repeated entreaties from those of her children living in the West, and by then a widow with no travel experience—even on a bus—the mother flew from Cairo to visit her U.S. daughter and two sons. Special reason for her second trip to the United States, in 1975, was to witness the Apollo-Soyuz launch at the Kennedy Space Center. At the launch site this visitor from far-off Nile country was accorded well-deserved treatment as a V.I.P.

The El-Baz family at home; left to right: Farouk, daughters Fairouz, Monira, Soraya, wife Pat and Karima.

"The alignment of the Gulf of Aqaba, the Dead Sea and the Sea of Galilee is no accident," El-Baz points out. "They all fall along that fault," a fact that was known long before the Space Age. What scientists wanted to find out from the Apollo-Soyuz enterprise was where the northernmost extensions of the Levantine Rift zone went.

Dr. El-Baz remembers how exciting it was for him and his colleagues to be hearing from outer space new information about the course of the fault for the first time: "I can trace it all the way to the river . . . I don't know the name of the river. I'll have to look it up on a map."

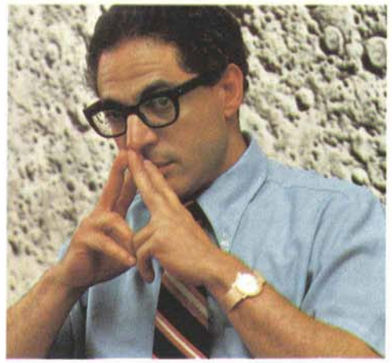
The astronauts had been told to look for anything of significance they saw north of the Sea of Galilee. They traced evidence of the Levantine Rift from that point slightly northwest to a region in the vicinity of the Golan Heights in Syria. At that point the rift splits out, "like a big fan," according to Farouk El-Baz's account, into a number of smaller faults.



Earth scientists recently have been expostulating that the Golan Heights region where the rift forks is a gigantic hinge and that the Arabian Peninsula plate pivots on this axis. As it rotates counterclockwise the huge rock-mass supporting the Peninsula grinds against the even more formidable and apparently more stable Eurasian Plate's outer edge located just inside the western border of Iran. The resulting squeeze is slowly narrowing the Gulf at the rate of nearly $2\frac{1}{2}$ inches a year and making the Red Sea wider by the same amount.

The slow, incessant sideswiping action of the Arabian Peninsula plate against the more inert Eurasian Plate has also been causing rock formations nearer the surface to buckle, a process to which, among others, Iran's Zagros Mountains owe their existence. The perpetual friction of one block against its bigger neighbor to the east is the cause of the disastrous earthquakes in southern Iran which occasionally make world headlines.

The second research area was deserts, and considering that they take up so much room on the face of this earth, it is remarkable that so little is known about them from a scientific point of view. Perhaps this is because many deserts are so immense, with environments that are so inhospitable that they tend to discourage visitors with scientific curiosities. Because skies over them can almost always be counted on to be cloudless, however, their expanses can be taken in with relative ease from a perch in outer space. Preliminary surveys of desert areas from great heights had shown such promise that it was determined to make more refined investigations an objective of the Apollo-Soyuz flight plan.



Dr. El-Baz and his colleagues had long since set general study goals aimed at a better understanding of deserts. They had been wanting to find out more about desert land-forms and how they evolved, the formation of desert erosion patterns and the history of the deposition of desert rocks.

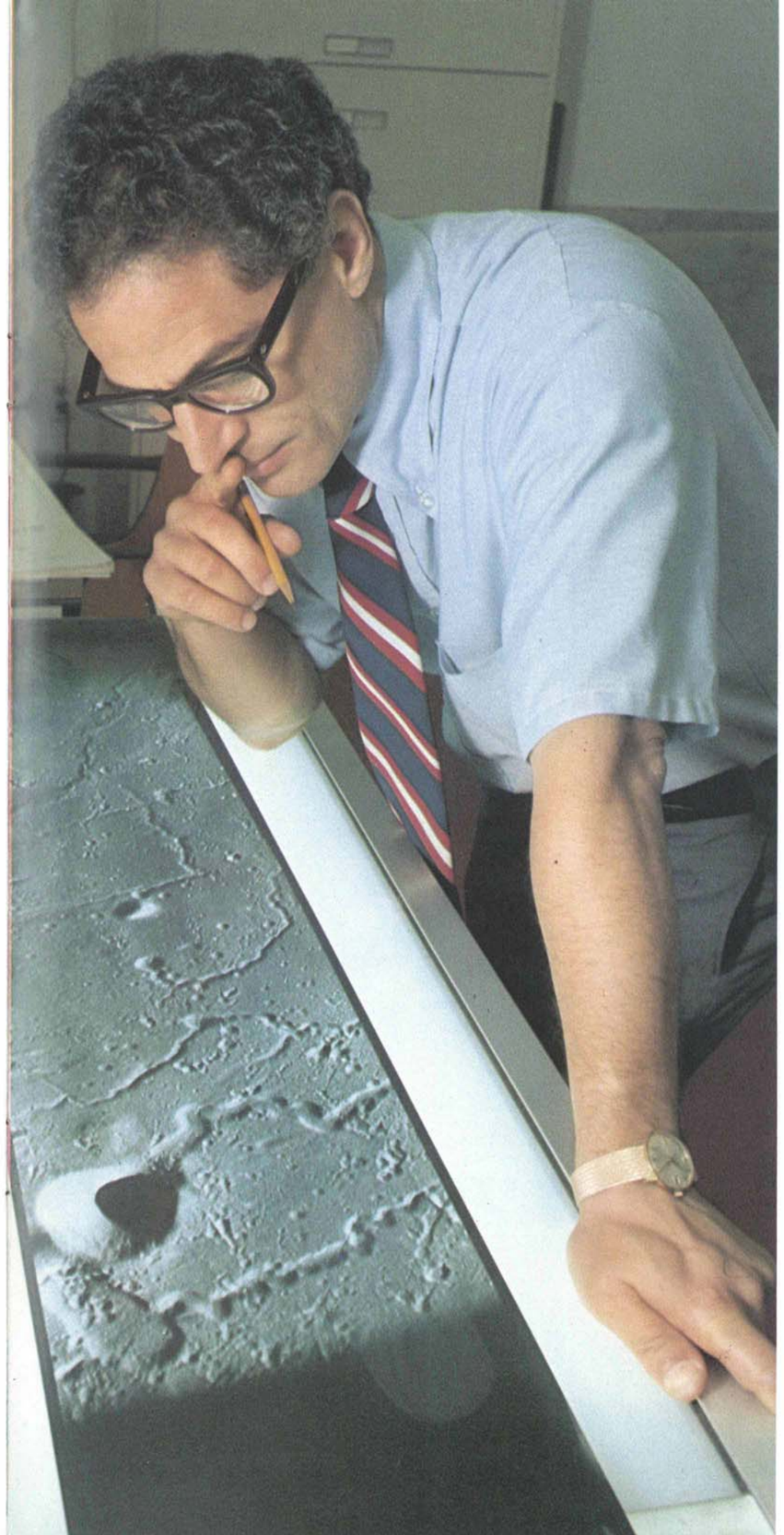
With this basic framework of inquiry Apollo-Soyuz crewmen were asked to help determine whether it is possible to gauge subtle variations in color accurately from space and at what altitude useful acuity begins to fade. They were to contribute answers to such questions as whether color film is a valid supplement to plain visual perception of deserts; what is the best way to map desert territories or to measure the growth of dune fields; just what *are* the basic dune patterns and how are they formed?

For studies of deserts associated with the Muslim world, stereoscopic photostrips were taken over parts of Mauritania and Algeria in the western Sahara, bands of the eastern Sahara which lie in Chad, Libya and Egypt and, maintaining a northeasterly course, over the Arabian Peninsula from a spot in Yemen straight across to Qatar. Many passes over these regions as well as elsewhere in the world were covered live via color television to give Ground Control instantaneous impressions of what was being viewed from the perspective of outer space. The high-resolution film taken aloft had been specially coated to improve color sensitivity by blocking out the effects of short wavelengths.

Wide-range color photography from space turned out to be an essential adjunct to desert research. The lens of a camera, however, is unable to pick up subtle shade gradients on desert surfaces with the same precision as the human eye. The challenge was to provide some standard which the men in orbit could follow so that their color judgments would be as objective as possible. The solution was as simple as it was ingenious: a doughnut-shaped cardboard wheel with two rows of color swatches around the rim, 27 colors with 27 tone variations of these same colors underneath; 54 shades in all to match every color the astronauts would see in their orbits over arid sands. (The reverse side of the wheel similarly carried every conceivable color found in the oceans.)

While they circled over assigned desert areas spacemen held the color wheel up close and turned it until they had selected a color that most exactly matched the shade of sand on the ground they were looking at. As they wrote down and communicated to the ground the keyed number on the wheel, "14-B . . . 24-A," a uniform record of the color of that particular sector of desert was being built up.

Scientists study and compare desert colors because they give the most reliable clues as to the relative age of zones of arid lands under investigation. The sand on most desert surfaces contains iron compounds which when exposed to the atmosphere slowly oxidize and turn into varying shades of russet. The oldest dune fields are the reddest. Those of more recent origin come in assorted shades of, well, sand—almost white for the youngest, then beige, tones of yellowish tan and brown.



All this is well established, but what is the significance of desert coloration in practical terms? Many large dune fields, nudged along by winds blowing over their crests, are constantly on the move and can overrun highways, railroad tracks, even entire villages which stand in their way. The reddest and therefore the oldest dunes are the most stable. Young, light-colored dunes are apt to be the most restless and to pose the greatest threat to anything in their path. Knowing their location and determining in which direction they are headed through such factors as shapes of individual dunes, local topography and prevailing winds, earth scientists are now in a position to predict danger and recommend steps to minimize it.

When the two Viking spacecraft made contact with Mars last summer (one year after Apollo-Soyuz and just seven years after the first moon landing) the information on dunes obtained in the Earth Observation and Photography Experiment also enabled scientists to make direct comparisons between types of dune fields existing on Earth and those observed on Mars. They have already found some striking similarities.

Farouk El-Baz, an introspective person, perhaps sees some irony in the fact that, growing up as he did in a part of the world known for its deserts, he is so preoccupied these days with the dune fields of the Middle East. There was one hint from his formative years in Egypt of what was to come. Spending his youth in Damietta, where one of the outlets of the Nile flows into the Mediterranean, young Farouk showed early signs of being what today we call "gifted." He attended high school in Cairo where he joined the Boy Scouts and, on field trips to the mountains east of the Egyptian capital,

quickly picked up an affinity for geology.

That absorption was to remain. El-Baz graduated from Cairo's Ain Shams University at age 20 with a B.S. in Geology and took a teaching job at the University of Assiut. But he wanted to broaden his academic horizons and landed on a government list of those eligible for a scholarship abroad.

The first bidder for Farouk's talents was Russia, which after family consultation and much thought was turned down. Then, in 1959 came an offer of financial aid for higher education from the United States. With El-Baz's background in geology, his graduate studies were placed under the supervision of the U.S. Bureau of Mines, which selected the famed Missouri School of Mines at Rolla as the institution at which the young Egyptian visitor would earn his master's degree in economic geology. Later Farouk divided his studies toward a doctorate between the University of Missouri and Massachusetts Institute of Technology.

The second, middle year of that strenuous program spent at M.I.T. marked an important milestone outside of any classroom or laboratory. While studying in the Bay State he met the girl who is now his wife, Catherine O'Leary, of Swampscott, north of Boston. At home in Arlington, Virginia, now are four attractive young daughters whose names —Monira, Soraya, Karima and Fairouz— as well as their dark good looks distinctly favor their Egyptian heritage over their Irish background from the North Shore of eastern Massachusetts, of which they are equally proud.

In 1964, the era of the Gemini space program, the brand-new Ph.D. received an offer of a teaching post from the University of Heidelberg, largely through the intercession of Dr. G. C. Amstutz, his doctorate program advisor. In Heidelberg, Dr. Paul Ramdohr, a world authority on meteorites, was at the time investigating the presence of minerals in meteorites and took the young geology teacher from overseas as a special student. Dr. El-Baz was being given another nudge in the direction of space and the moon.

A slight detour intervened in the form of a year spent back in Egypt in offshore oil exploration before El-Baz found himself back on track. The line led him straight to Washington and employment with Bellcomm, Inc., a small firm contracted by the U.S. Government to do planning and give technical support for the National Aeronautics and Space Administration. It would be another two years before the first manned lunar landing, but Bellcomm already had thousands of photographs taken in orbit of the moon's surface. Through the vision of a geologist, Dr. El-Baz examined each of these prints, and when the time came to recommend an appropriate place for Apollo astronauts to put down on the lunar surface he was ready.

As the Apollo program progressed through its projected series of human orbits of the moon and the landings, Dr. El-Baz became mentor to the participants, instructing lunar-bound astronauts on every aspect of the geology and geography of the moon. Training sessions on orbital science and photography went on during odd moments the astronauts could spare almost until the moment of blast-off. During his six-year association with NASA's on-the-scene investigation of the moon Farouk El-Baz moved from the post of geologist in Bellcomm's Lunar Exploration Department to supervisor successively of Lunar Science Planning and Lunar Science Operations to supervisor of Lunar Exploration for Bell Telephone Laboratories in Washington. In 1970, in the middle of the period of his total involvement with the moon, El-Baz took time out to become a U.S. citizen.

Below: Masked to prevent infection, El-Baz gives preflight briefing to astronauts Stafford, Brand and, at right, Slayton. Right: El-Baz and assistant Jane Murphy compare photos with color wheel.

NASA photograph

From 1960, when he left Egypt for the United States to begin his higher education, it was almost six years before Farouk El-Baz returned to his home country, as a fully qualified oil geologist. Since then, in his capacity as space scientist, Dr. El-Baz has been renewing his ties with the Middle East with ever-more-frequent journeys. Under U.S. Information Service sponsorship he has escorted Apollo astronauts on tours to Saudi Arabia, the United Arab Emirates, Qatar, Kuwait and Egypt. His link with Saudi Arabia has grown especially close since the appointment of Dr. Muhammad Abdú Yamani (no kin to the present Minister of Petroleum and Mineral Affairs), a professional geologist and personal friend, as Minister of Information.

In May 1974, Dr. El-Baz had an audience with His Majesty King Faisal in Riyadh, during which the late monarch gave his enthusiastic support for continued studies of the Arabian Desert from space. El-Baz returned to the Saudi Arabian capital in March 1976 to attend the Islamic Conference on Science and Technology. The five-day parley, held under the auspices of Riyadh University and opened by His Majesty King Khalid, brought together 160 distinguished scientists, educators and engineers from all over the Muslim world. While there Dr. El-Baz met with Amir Fah'd, the Crown Prince, who spoke of his desire to establish a scientific research institution in Saudi Arabia. In Dr. El-Baz's opinion, the Arabian Peninsula is not only an ideal desert laboratory, but also offers optimum conditions for a whole spectrum of solar energy studies.

In the 18 years since leaving his Cairo classrooms Farouk El-Baz has accomplished more than many gifted men and women have succeeded in doing in long lifetimes and attained a reputation in his field of the highest order. Conceding that the West has given him a great deal of knowledge in the space-science field, El-Baz talks feelingly about the debt he is convinced he owes to the other side of the world: "I have not forgotten my link with the Arab world, and I cannot. I came from there. I continually ask myself how I can contribute to scientific development there. And I believe one of the best ways I can pay back some of the knowledge I have gained is to use it, particularly for those who need it most."

Brainerd S. Bates, formerly Aramco's chief writer on petroleum in Dhahran, now free-lances from West Virginia.

THE ALCALDES OF CALIFORNIA

WRITTEN BY BETTY PATCHIN GREENE

The multicultural American heritage sometimes produces surprises. For example—how many of us know that in the years before California joined the Union it was governed under a system with roots reaching back to the Arabs? Not many. But the system's genealogy can be clearly traced across the world and through the years.

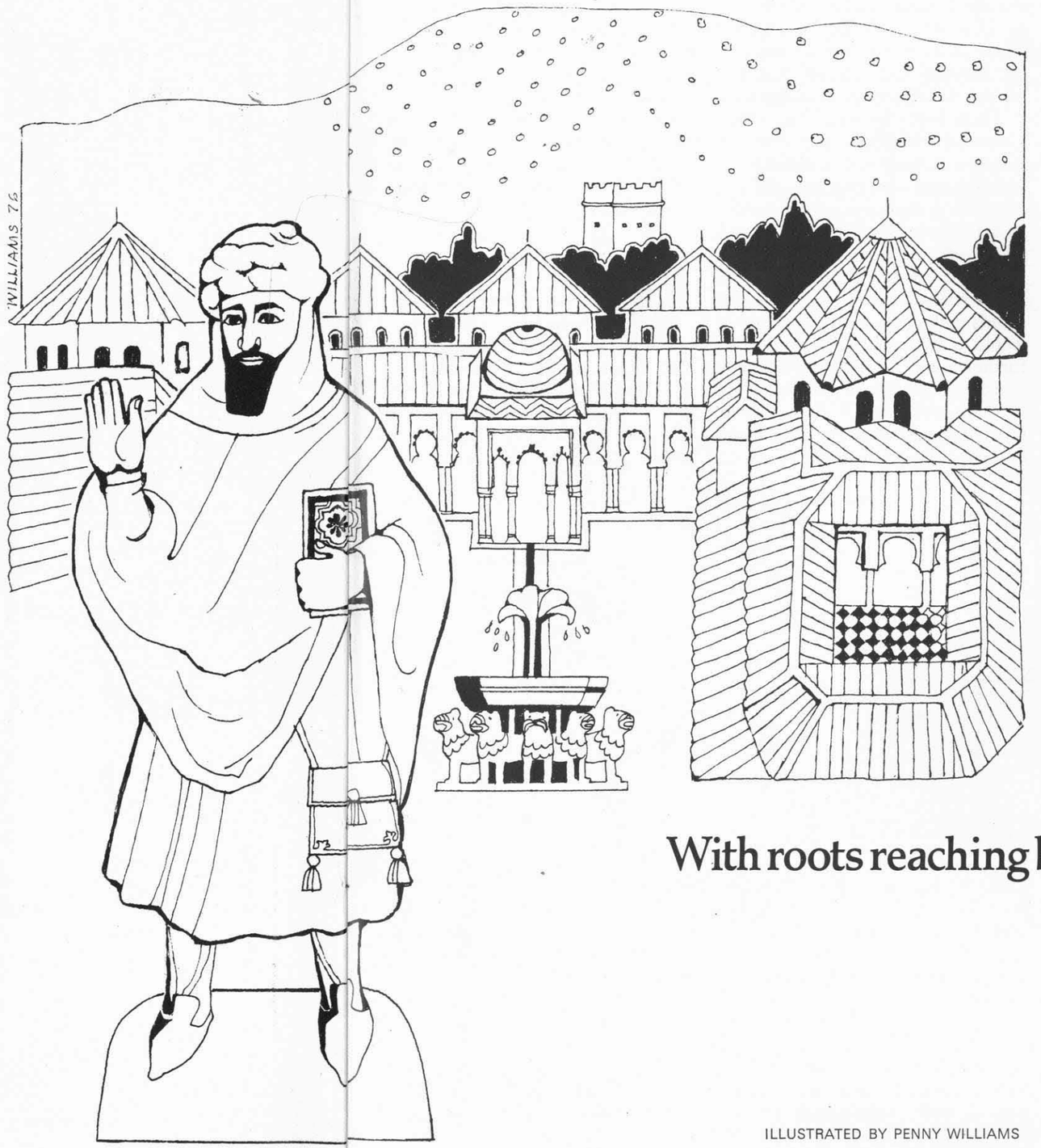
In the early 1840's foreign visitors to California—then a part of Mexico—noticed "an absence of government—even its forms and substance set aside . . ." In a sense this was true; long neglect by Mexico City had weakened executive authority in what was then called Alta (Upper) California. Actually, however, there was a system—one administered by local functionaries known as *alcaldes*. This is a Spanish term derived from the Arabic *al-qadi*, meaning judge, and bearing more than a semantic resemblance to the *qadis* of Islam.

The first *qadi* is said to have been appointed by the second Caliph, Omar, so he would be relieved of the constant need to settle local disputes personally. In a fairly simple society the *qadi* was at once responsible *to* superior authority and *for* the well-being of the people. With the expansion of Islam, government became more complex. Subsequent leaders continued the practice of appointing *qadis*, but gradually their role expanded from simple arbitration and rendering judgments to include administrative matters such as managing religious bequests or acting as guardians for orphans. In villages, towns and city wards, *qadis* filled a basic social need. As their role increased in importance specific qualifications for the position were stipulated, the most important of which was that the appointee should be able to administer justice under the Shari'ah—the law of Islam. In practice, over the years, it was also augmented by a fund of common sense.

When the Arabs invaded Spain in A.D. 711 they brought the institution of the *qadi* with them (See *Aramco World*, September-October, 1976). They not only introduced an artistic and intellectual renaissance, but a considerable degree of justice and social stability. By and large, during the centuries of Muslim control, Spanish Christians and Jews were able to work and worship freely within the society. In this amalgam of cultures it was only natural that as areas where Christians lived in contact with the Muslims returned in time to Christian control the proven role of the *qadi* in society should be appreciated and maintained, albeit in somewhat modified form. Thus evolved the *alcalde*, and for a period the two functionaries coexisted in different parts of the country.

Gradually the *alcalde* system of the Christians grew and changed. Following the fall of Granada, the last Islamic stronghold, in 1492, Spanish society became increasingly formal and stratified. In the hierarchy the *alcalde mayor* functioned on a local level; the *alcalde de corte* in and about the royal court. In both cases their duties were at least in part judicial.

The title *alcalde* crossed the sea with the conquest of Mexico by Spain in the early 16th century. The government of the Viceroys was patterned on the mother country—and was perhaps even more formalized than at home, as provincialism is apt to be. But curiously enough, the simple, personal element in the role of the *alcalde* (such as had existed under the first *qadis* in Arabia) returned through 17th-century missionary activity. As small military expeditions moved northward from Mexico City toward what is now the United States' border, they were accompanied by priests bent on converting the natives to Christianity. Since there were few priests and many Indians, religious instruction often made tactful accommodation with old beliefs. For administrative purposes the missionary-explorers simply turned the village chiefs into *alcaldes*, empowered to dispense justice under the supervision of the nearest priest.



With the settlement of Upper California in 1769 the *alcaldes* arrived on the Pacific Coast. In theory they were to work judicially with the *ayuntamientos*—town councils—under government supervision. In fact, they became almost autonomous.

After the break between Mexico and Spain in the early 19th century California was left adrift. By the 1840's the handful of educated leaders realized they could no longer depend on the central government for support and there began to be talk of an alliance with a foreign power. There were several aspirants: England, France, Russia and the United States. With the outbreak of the Mexican-American War, Commodore Sloat solved the problem by raising the American flag at Monterey in July 1846.

The conquest of the vast, almost empty territory had been virtually bloodless and the U.S. military authorities were anxious to keep it that way. To this end they too, like the missionaries before them, began

With roots reaching back to the Arabs:

ILLUSTRATED BY PENNY WILLIAMS

working through the system that was already there. *Alcaldes*—Americans, native Mexican-Californians and occasionally reservation Indians—were appointed as needed.

In Monterey, Sloat's successor, Commodore Stockton, bestowed the office of *alcalde* on a surprised Naval chaplain, Walter Colton. The first American *alcalde* had come on the scene. Initially Colton—a man of some worldly experience from service in the Mediterranean and Levant—regarded the position with awe:

"It devolves upon me duties similar to the mayor of one of our cities, without any of those judicial aids which he enjoys. It involves every breach of peace, every case of crime and every land grant within a space of 300 miles. From every other *alcalde's* court in this jurisdiction there is appeal to this and no higher tribunal . . ."

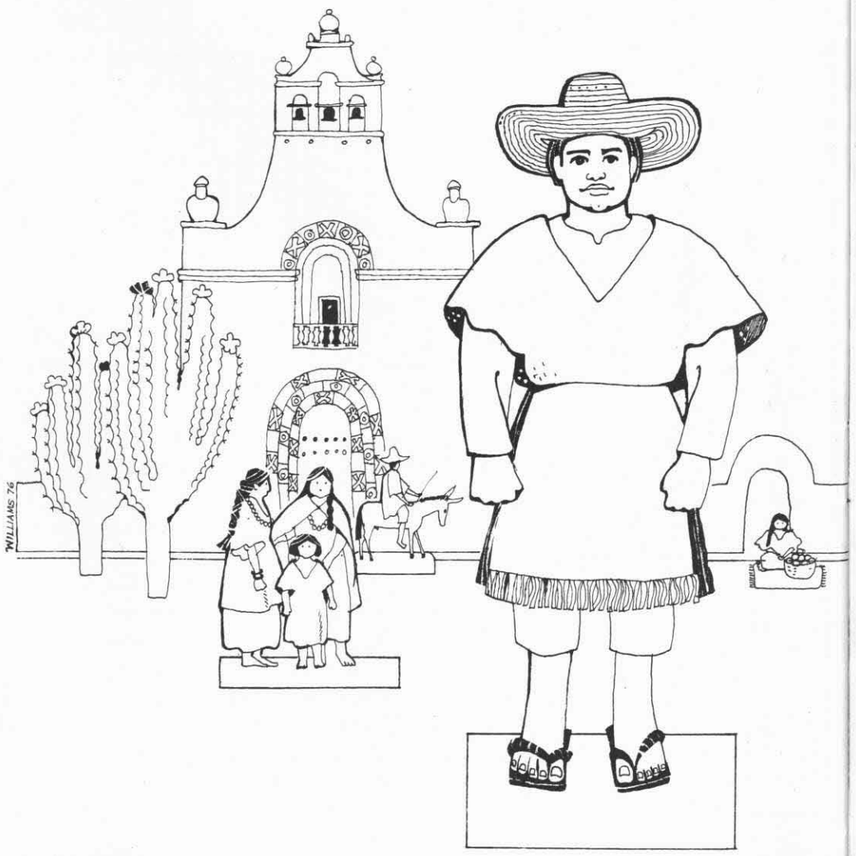
This was the situation, however, that had evolved during the last years of Mexican administration and so Colton, and some equally surprised colleagues, accepted and successfully worked with it. The American military regime did provide some central authority, but as manpower was limited and the territory nearly unlimited, the *alcaldes* became to the governor as the *qadi* had been to the Caliph.

The success of Colton and his fellow *alcaldes* was based on the old qualifications: a strong moral regard for law (in this case Mexican) and down-to-earth common sense. Every sort of problem, serious and absurd, turned up in court. The "Reverend Alcalde" not only passed sentence but, like the traditional *qadi*, arbitrated both legal and domestic disputes—remarking dryly that the task was made easier by the almost total lack of young lawyers.

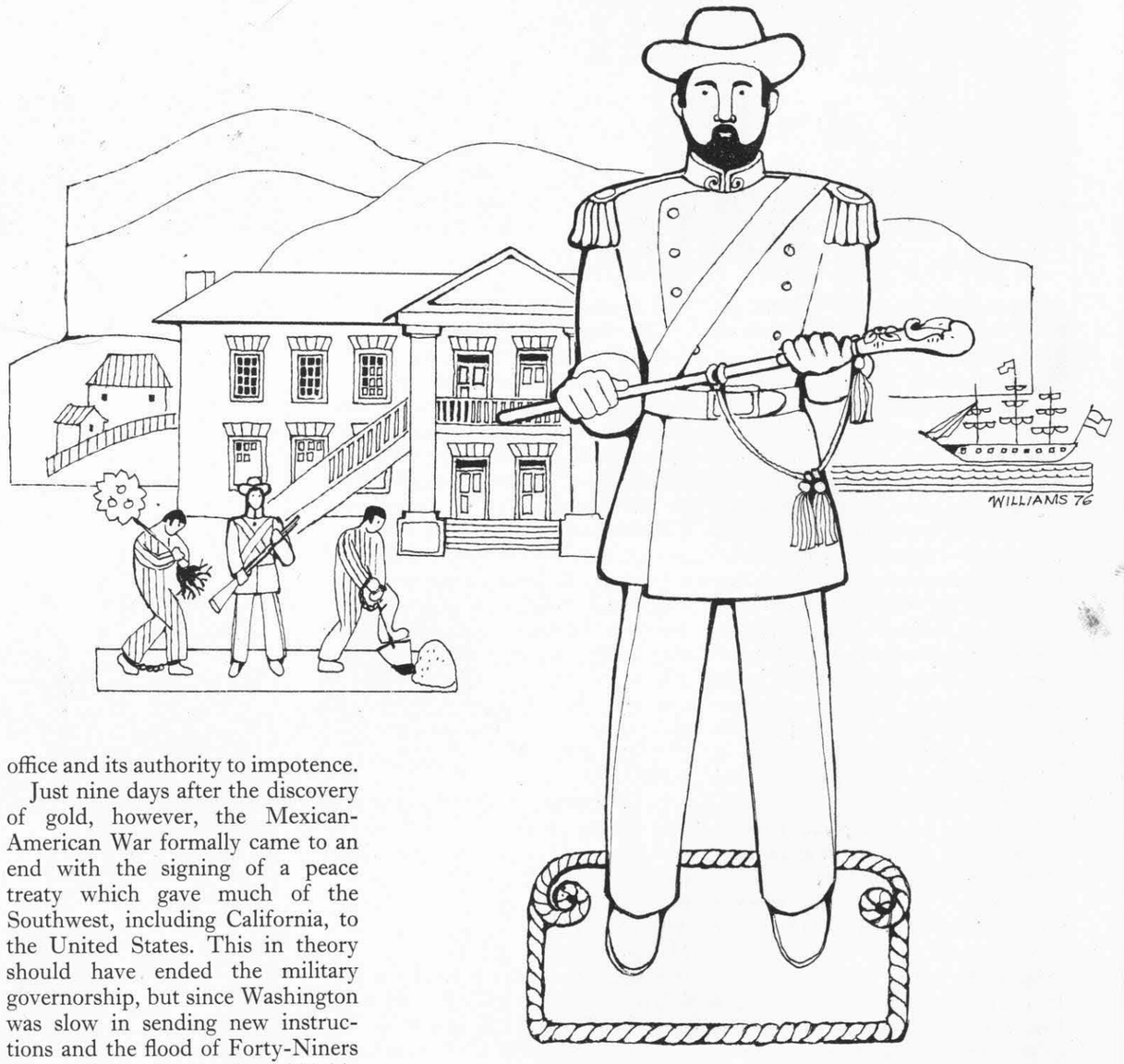
Following local custom, obstreperous teenagers were not spared the rod—but it was kept in the family. Colton saw to it that parents chastised their children under his alcaldean eye, on occasion stopping the procedure to deliver a lecture on the parental bad example that had caused the children's misbehavior.

There being few public buildings Colton discontinued the previous practice of fines—for Caucasians—and floggings—for Indians—in favor of work gangs for all offenders. "Every bird should build its own nest," said he, as the future tenants raised the jailhouse walls. Later a handsome schoolhouse—which still stands today—went up. Education would surely prove a deterrent to further crime, Colton believed.

Across the bay in Santa Cruz, Colton's colleague William Blackman handed down other imaginative decisions. On one occasion a vaquero (cowboy) pulled a pregnant woman from the path of a wild bullock, while also, unfortunately, causing her to miscarry. The husband hauled the rescuer into court, demanding damages for the unborn child. This the *alcalde* granted—but stipulated that the vaquero should put the woman back "in the state in which he found her." The case was not pressed. It was a solution worthy of Goha, the famous wise man of Middle East folklore (See *Aramco World*, May-June, 1971).



With the discovery of gold in California in 1848, mining towns burgeoned in the foothills. In the gold camps *alcaldes* were elected by the drifting population, but as the military governors didn't have enough forces to police the camps, "miner's law" soon reduced the office and its authority to impotence.



Just nine days after the discovery of gold, however, the Mexican-American War formally came to an end with the signing of a peace treaty which gave much of the Southwest, including California, to the United States. This in theory should have ended the military governorship, but since Washington was slow in sending new instructions and the flood of Forty-Niners was paralyzing the simple and highly personal administrative and judicial system, the last military governor, General Riley, bowed to increasing public pressure and called a constitutional convention at Monterey in August, 1849.

There the *alcaldes* functioned for the final time, as inspectors of elections. Many were of such caliber that they continued in other public office after the territory became a state the following year, but the first American *alcalde*, Reverend Colton, was not one of these; he returned to his family on the East Coast, where he died shortly after, in 1851.

Old California has receded into history, a picturesque memory. But what would have happened in the volatile transitional years if the American military governors had not found the *alcaldes* there at hand? Certainly, these judges never worked within the standard codes of Western jurisprudence—nor would those codes have suited the frontier circumstances. But the *alcaldes* were the inheritors of a very old tradition which, for some 80 years, served California as well as it had Arabia centuries before.

Betty Patchin Greene lives and writes in California.

the first Mosque in America was built in Cedar Rapids

Islam in Iowa

WRITTEN BY PHILIP HARSHAM PHOTOGRAPHED BY KATRINA THOMAS

Cornfields dominate. Verdant and lush, their precise rows march on and on to the horizon. On the west is the wide Missouri and on the east the great Mississippi, two of North America's most majestic rivers. This is Iowa, early home of the Sioux, the Algonquin and the Iroquois, but whose rolling plains more often are described now as "the heartland of the United States" or "America's breadbasket." Iowa, 33 million acres of farmland. Producer in 1975 of a billion bushels of corn, of almost $7 billion worth of agricultural products. A landscape dotted with small towns, tree-lined streets and the white spires of churches. Where the American work ethic is alive and well. Where practically everybody, man, woman or child, sports what is known abroad as the "all-American look."

And where, five times a day, a tightly knit group of American Muslims faces Mecca for the prayers of Islam.

Anomalous? Of course. But consider that a few Muslims had found their way into the Cedar Rapids area as early as 1885, a year before the golden-domed Iowa capitol building was completed in Des Moines. Note that the first building on the North American continent to be designed and used exclusively as a mosque was constructed in Cedar Rapids. Note that there is in Cedar Rapids, too, the Muslim National Cemetery, with all graves facing Mecca, believed to be the only burial ground in the United States given over completely to those of the Islamic faith. And consider that at last count 13 Arab-Americans, among the 40 or 50 Arab-American families in Cedar Rapids, held the title of Hajji, meaning that they have made the Pilgrimage to Mecca, Islam's holiest city (See *Aramco World*, Nov-Dec, 1974).

Cedar Rapids is the home of Lebanese-American Abdallah Igram, the World War II Army veteran who in 1953 went to President Dwight D. Eisenhower with questions nobody had previously asked: Why don't the military services recognize the religion of American Muslims just as they recognize that of Protestants, Catholics and Jews? Why is there no symbol for the Islamic faith on a Muslim serviceman's identification tags so that he might be given fitting burial rites if he's killed in action? Good questions, answered the former supreme commander of Allied forces in Europe, and at the Iowan's urging he pushed successfully to have the symbol "I"—for Islamic—stamped on the dog tags of American Muslim soldiers.

Cedar Rapids is also the home of the Mid-America Arabian Corporation, a young export company trying at the moment to adapt some Iowa dairy-farming methods to the needs of Saudi Arabia. "We've taken so much from the Middle East—our heritage, our religion," says the company's president, William Yahya Aossey, Jr., whose father was born in Lebanon. "We'd like now to go full cycle, to take something of great value from America back to the Middle East." Aossey is working toward a clear definition of that cycle. As this is written, he and a Lebanese-American associate, Hassane Aly Ghais, are setting up near Jiddah, Saudi Arabia, a pilot project to force-grow forage grasses in a controlled environment (See box). At the same time, a 16-year-old Saudi Arabian, Kassem Salah Abdul Azim, on his fourth visit from his native Jiddah, is improving his English as a guest in Aossey's Cedar Rapids home.

Visitor Kassem, top, with Yahya Aossey, 6.

Above and below: America's first mosque, about 1934.

Abdullah Ingram teaches Arabic to Cedar Rapids children in a Sunday morning class at the Islamic Center.

A dairy project may soon bring...

Iowa to Arabia

There is in central Cedar Rapids, Iowa, U.S.A., a company called the Mid-America Arabian Corporation, Ltd. It is headed by the three sons of the late Hajj William Yahya Aossey, Sr.—Joseph, 40, Albert, 37, and William Yahya, Jr., 34, each a Cedar Rapids native, each a pilgrim to Mecca, and each a devotee of things Arab as well as all things Iowan. Mid-America Arabian, one of six interlinked Aossey companies, classifies itself as an export firm, and its principal export—if all goes as planned—will be Iowa-style dairy production for Saudi Arabia.

In conjunction with a Jiddah firm the Aosseys hope to develop a model farm combining features of Iowa farms with some of those found in California and Arizona facilities which are suited to the climate, land and needs of the Middle East.

The primary effort at the moment is toward providing the green forage and fiber necessary to a milk-producing cow's diet. Using a concept already tried by others, William Aossey has developed an environmentally controlled grass-growing unit that will multiply up to eight times in eight days the food value of each grain seed used. That means that five pounds of seed can be converted to 40 pounds of green roughage—roughage intended to supplement the dry concentrates fed cattle—in eight days. And the protein and chemical content expand proportionately.

All this growth takes place in a trailerlike 10-by-24-foot unit complete with controlled light, humidity, temperature and water. Lining the unit's interior walls are stacks of shelves fitted with water-spraying devices. And on each shelf are rows of large plastic trays in which the food grasses are grown.

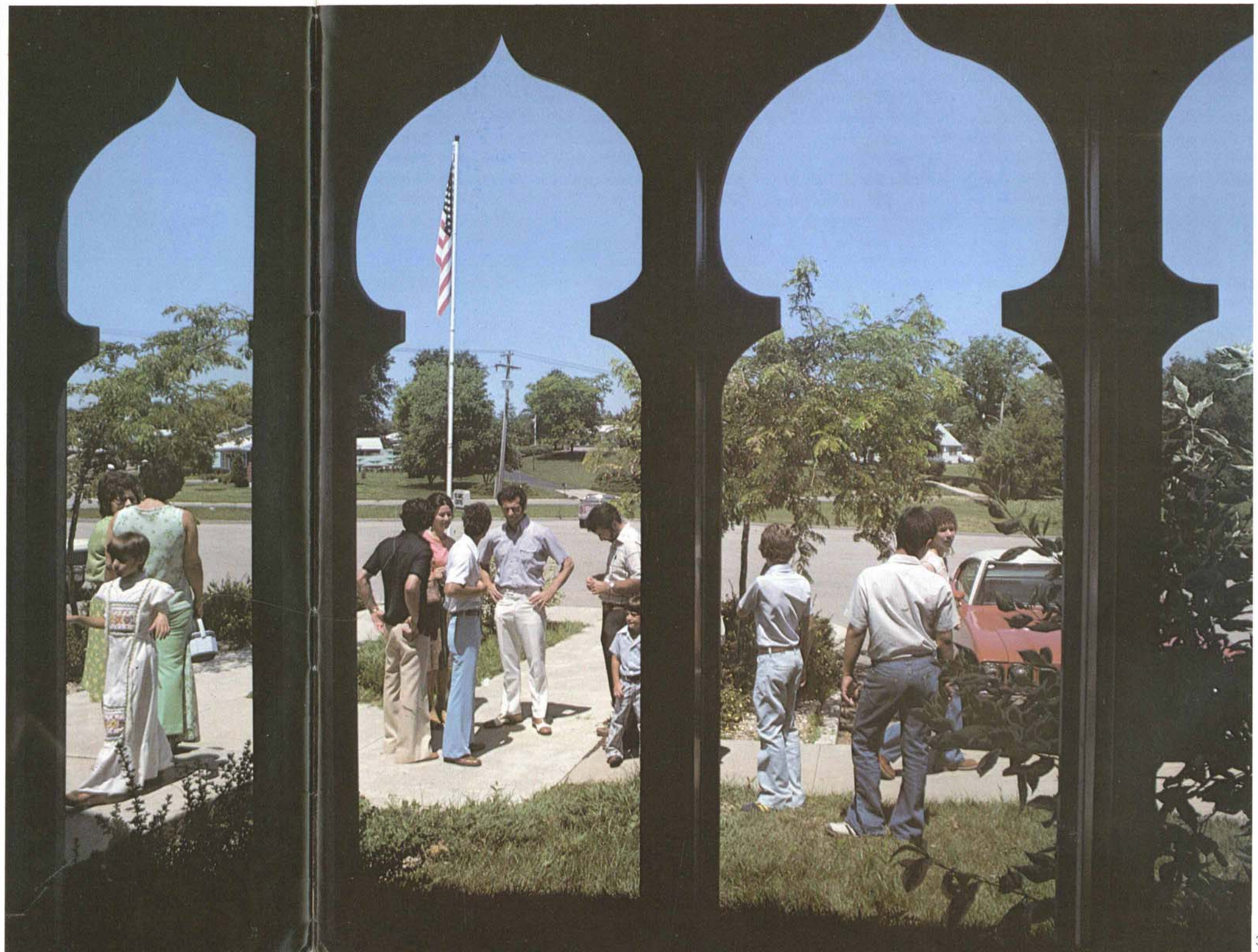
"Each unit will produce roughly two tons of animal feed a week, with minimal fertilization," William Aossey says. "With about 95 percent humidity, temperature controlled to about 70 degrees, and special lights that simulate sunlight 24 hours a day, the seed germinates within 24 hours." No pesticides are needed in the utopian environment. Water—each eight-day crop takes only 250 gallons—is pumped from tanks at each end of the unit and constantly recycled so that the crop is grown with 93 percent water efficiency. There's no waste in the crop, either; at the end of each growing period the trays contain a thick seven- or eight-inch stand of succulent grass, a tangled mass of high-protein roots, and a residue of ungerminated seeds. The contents are dumped out, leaving clean trays, and every ounce becomes food. The grain used may be wheat, rye, barley, oats or any combination. Aossey says the cost of the resulting animal food totals out to $55 a ton, excluding depreciation on the equipment, whereas even American dairy-belt farmers expect to pay up to $190 a ton when drought conditions strike. He calculates that 14 of the units will provide ample supplemental forage for a 500-cow herd.

Meanwhile, Aossey is collaborating with agriculture experts at Iowa State University, with grain analysts, with water engineers, with packaging specialists. And he's commuting between Cedar Rapids and Jiddah. Nobody can say yet that this Iowa-born Muslim will be successful in transplanting Iowa dairy production to the Middle East. But William Aossey is betting he will be.

Christian Arabs came first. That was the pattern of Arab emigration in the 19th century, of course; Christians, often already exposed to Western ideas and finding their religion shared well beyond their homeland boundaries, were at first more ready than Muslims to seek acceptance abroad. Precisely who was the first to come to Iowa or why he happened to choose the American Midwest, nobody alive today is quite sure. It might have been Tom Bashara, a Syrian from the Damascus area. Or it might have been Lebanese brothers Charles and Sam Kacere. It is known that all arrived in Cedar Rapids in the 1880–1890 era, all did some peddling—tramping the countryside with dry goods and notions for farmwives, and all later established Cedar Rapids shops from which they supplied the Arab peddlers who came after them.

As to why they chose Cedar Rapids, it might have been simply their seeking of a new frontier. The first bridge to span the Mississippi River had been completed at Davenport and the first train from the East had moved into Iowa in 1856. Just beyond lay Cedar Rapids, site of abundant waterpower, a thriving milling center for both grain and lumber, fast becoming a trading center because of its proximity to riverport and railroad facilities—and a good jumping off place for the open lands of Minnesota and the Dakotas to the north and northwest.

By 1905, at any rate, Bashara and the Kaceres had made their presence in Cedar Rapids well enough known that Abdul Aossey heard about them while on a ship outbound from Brazil. Young Abdul had set out from his home in Nabatiya, Lebanon, for New York initially, but misadventures, spawned by his inability to read, write or speak any language but Arabic, led him to South America. Continuing on toward New York after a sojourn in Brazil, he was befriended by an American who commented that he'd run across few Arabs in his extensive travels; he had, however, met some brothers named Kacere in, of



In their Iowa garden, the Charles Ingram family pray toward Mecca. They try to join together as a family for at least one of the five daily prayers.

Nazih Cheetany (right) paints religious sayings on glass.

all places, Cedar Rapids, Iowa. As Abdul Aossey told the story much later to his sons Anace and David, who with their mother still live in Cedar Rapids, he took a train for Iowa as soon as his ship reached New York. There he found not two but eight Kaceres, the early arrivals having sent money back to Lebanon to finance voyages for their brothers. Using their Cedar Rapids general merchandise shop as a supply base, the Kaceres peddled throughout the area, often ranging well into Minnesota. Christians all, they'd had little difficulty in finding acceptance with their largely Protestant customers.

They welcomed their fellow countryman and staked the Muslim Abdul to his first peddler's pack.

As did most immigrant peddlers, Abdul Aossey started with cases of needles, thread, lace and other small notions, walking nine or ten miles a day, spending nights in barns, churches, schools, occasionally being invited to sleep in a farmer's home. He soon graduated from needles and lace to more profitable yard goods, linens and prints. As had the Kaceres, he sent for one of his brothers, Sam. Within three years they'd brought over three more Aossey brothers, Yahya (who became William Yahya Aossey, Sr.), Daoud (David) and Muhammad. And the roots of a Muslim community were embedded.

By the time he reached Cedar Rapids in 1914, says Hassan Igram, now 78 and a retired grocer, there were perhaps 45 Muslims in the area. They were for the most part single men who hoped to earn enough to return to the Middle East to find wives. There were only two families —those of Sam Allick and James DeHook. But the pace of emigration from the Middle East—particularly from the militarist Ottoman Empire that Turkey had forged—was picking up. And it was not long before there was a full-fledged Muslim community giving prominence to the family names of Sheronick, Kallel, Habhab, Bedra, Hamed and Omar among others. Most of the newcomers began the same way, as pack peddlers. As they earned, they became more the traveling salesman, adding horses and buggies to their capital holdings and greater variety to their product lines.

By 1914 a few had acquired small trucks; given this greater mobility some began buying from, as well as selling to, Iowa's scattered farmers, and they became important providers of fresh eggs and butter to the city folk. Typically, the peddler evolved eventually into the small shop owner. By the mid-1920's Arab grocers and shopkeepers could be found in Fort Dodge and Gilbertsville; in Sioux Falls, South Dakota; Michigan City, Fort Wayne and Terre Haute, Indiana; and scattered through Minnesota and Nebraska. Cedar Rapids alone could claim more than 50 shops and grocery stores owned and operated by Arabs. And it was Cedar Rapids that attracted the greatest Muslim contingent.

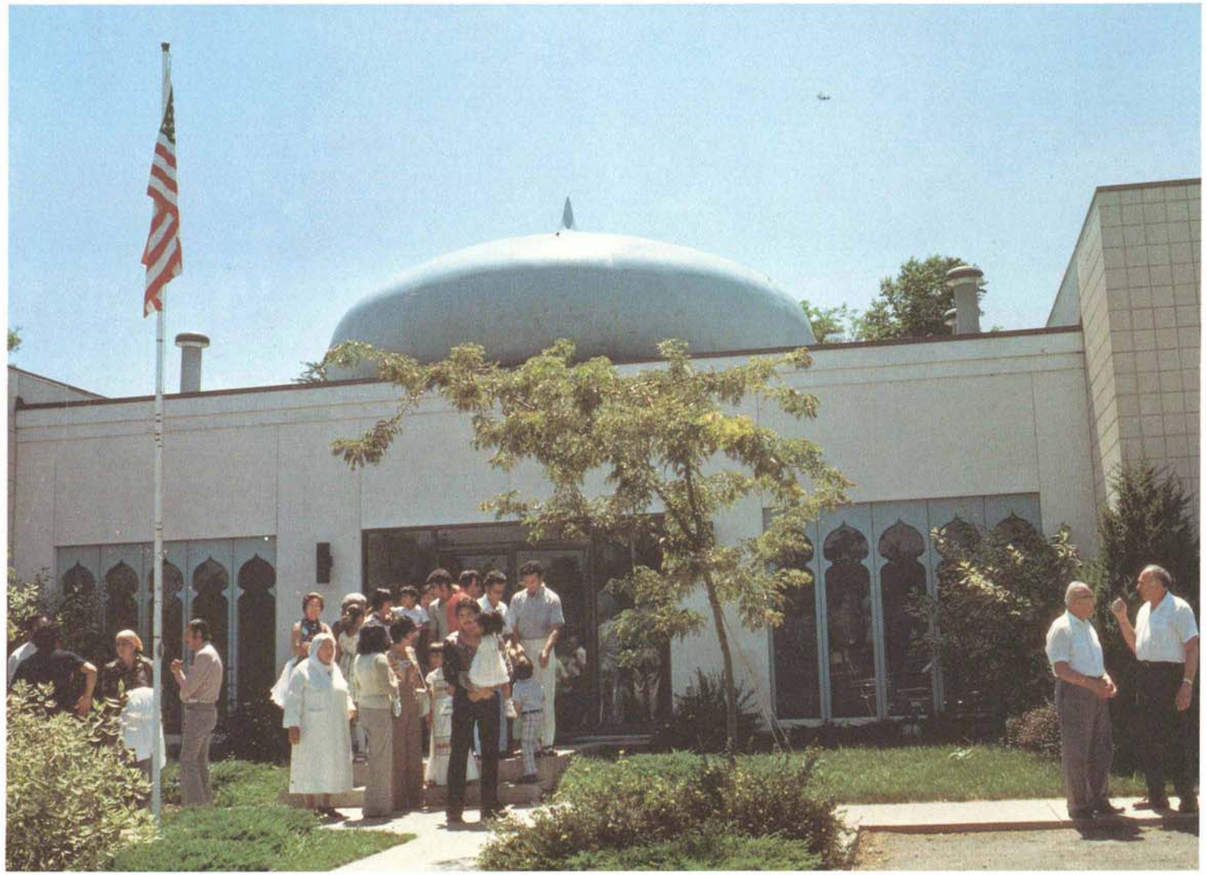
Few Iowans drew a distinction between the Muslims and the far greater number of Christians, especially in the early days. Non-Arabs tended to lump them together as "the Syrian peddlers," most of them having come from Lebanon before that country was partitioned from Syria. After 1914, however, religion was accorded greater emphasis. One reason is that the Arab Christians in 1914 completed their own Cedar Rapids church, St. George Syrian Orthodox—now St. George Antiochian Orthodox Church. Another is that the Turkish Ottoman Empire had aligned itself with the Axis powers in World War I, the Turks were synonymous in the minds of Americans with Muslims, and, well, there were some of those right there in River City. Not surprisingly, more than a few peddlers were sent packing by outraged farmwives crying "Turk!" And present-day Aosseys recall that one of their forebears was chased away at gunpoint when he innocently revealed his religion to a Turk-hating farmer whose dinner he'd been sharing.

"We had no organized worship then," says H. K. Igram, now 82, who reached Cedar Rapids in 1919 by way of Nebraska. "Even then there were only 10 or 15 actual Muslim families here—most of us were still single men; but we met in homes for Friday prayers."

By 1920 the little band of Muslims had converted a rented hall into a mosque. By 1925 they'd formed the Rose of Fraternity Lodge to promote the social and cultural, as well as religious, aspects of their heritage. An Islamic pride was developing, and in 1929 plans for a true Cedar Rapids mosque were set into motion—just as the United States was entering the Great Depression.

Depression hardships at the same time heightened the Muslims' desire for their own house of worship and frustrated their efforts to complete it. Construction moved along, the men doing much of the work themselves, but it was not until 1934 that the mosque could be called completed. True to the anomaly of its location, the mosque bore little resemblance to any the immigrants might have known in the Middle East. It might have been a prairie-country schoolhouse, what with its stark lines and clapboard exterior, or a country church—except for one thing: sitting regally atop a protruding entrance foyer was a dome and from it extended a crescent-topped spire. Signs in both English and Arabic proclaimed this a Muslim place of worship.

"It was a true mosque, the first building ever constructed on this continent specifically for use as a mosque," says 52-year-old Abdallah Igram, Hassan's son. Abdallah and Hussein Sheronick in 1936 became the first Cedar Rapids-born Muslim boys to master the Koran in Arabic. "The building was a combination mosque and social hall," Igram says. "But the first floor was designed purely for prayers and that's all it was used for." William Yahya Aossey, Jr., who had a leading role in building the mosque's replacement almost 40 years later, calls the original hall "the mother mosque of North America," a name that has carried



Cedar Rapids Muslims gather outside the Islamic Center and mosque after Sunday prayers. The new Center, completed in 1972, replaced the original wooden mosque.

Philip Harsham

William Aossey checks trays of grass he hopes will help bring Iowa-style dairy production to Saudi Arabia.

over to the present Cedar Rapids mosque.

Cedar Rapids Muslims had hired an imam—Imam Karoub—even before the mosque was built. Karoub, who arrived in 1929, served as the community's religious leader until 1932, when he was succeeded by Kamil al-Hind of Damascus. Imam al-Hind pushed for completion of the mosque and boasted in an interview given a Cedar Rapids *Gazette* reporter early in 1936 that the number of Muslims using it already exceeded 150.

Then came Imam Khalil al-Rauef. Urbane, charismatic, with connections to the Saudi royal family, al-Rauef reputedly came to the United States (carrying visa No. 1 from whatever diplomatic station he'd applied to) at the request of America's first lady, Mrs. Franklin D. Roosevelt. Al-Rauef, Iowans remember, was an authority on Arabian horses and Eleanor Roosevelt at the time was in charge of a horse show that featured Arabians. Nobody remaining in the Cedar Rapids Muslim community remembers just why al-Rauef settled there. It's assumed that an educated and devout Muslim trying to find a niche for himself in a new country would gravitate toward the best organized Islamic community—and in the United States that was Cedar Rapids.

Nobody was sorry that he came. He stayed only through 1938, but he still was working in the community's behalf 30 years later, when plans to build a new mosque and Islamic center were set in motion. "He was back in Jiddah when I made my Hajj," H. K. Igram says. "I found him there and he arranged for me to have dinner with the late King Faisal." He grinned. "I told them we needed a little financial help over here to build a nice new mosque."

A few other Cedar Rapids Muslims passed that word, too, not only in Saudi Arabia, but to any Islamic nation that might listen. Though no financial aid was immediately forthcoming, they were undaunted. Community leaders obtained bank loans for the $120,000 structure and went right ahead with their mosque-building program.

The new Islamic Center, on Cedar Rapids' First Avenue, S.W., was completed early in 1972. Two years later, King Faisal forwarded a check for $45,000, a gift, he said, from the Saudi Arabian people. Soon thereafter the Government of Kuwait contributed $6,000 and Libya provided a supply of Korans. "They found that we were serious," says William Yahya Aossey, Jr. "We were the first group to have approached these governments for grants, be turned down and go ahead with our building anyway."

The little dome and crescent are gone from the original mosque now, and the building is known as the Robert Dotzauer Community Center. At the same time, religious activities have gained momentum at the new Islamic Center, and Muslim students attending nearby colleges have injected new blood into the community. "It certainly isn't Islam as we knew it at home," said a young Pakistani student. "The religion has adapted to American culture. But that is good. Islam is a religion that can adapt, despite its many ancient traditions."

Friday is the Islamic Sabbath in Cedar Rapids, as elsewhere. But because the American work week is geared to a Monday-through-Friday schedule, most working Muslims there observe the Sabbath on Sunday. Lay leaders are all-important to the Friday and Sunday prayer services, the mosque having no imam at the moment, and to the Arabic-school and Sunday-school programs. Women, too, have taken on active roles in mosque programs, and they attend prayers, kneeling along with the men on the mosque's bright blue carpeting, but at the rear of the room.

The community was not always so willing to bend. "I went to Arabic school for 13 years," says Abdallah Igram. "I'd come home from public school, then turn around and go to Arabic-language classes. We'd be at the mosque every weekday from 5 to 7 p.m. and on Saturdays from 9 a.m. to 3 p.m. with an hour out for lunch. For 13 years. And I worked nights in my father's grocery store, too, all that time." The regimen seems to have made Igram a stronger Cedar Rapidian as well as a stronger Muslim. He's credited by friends as having done as much as any man to gain acceptance for Islam in America. He and Cedar Rapids contemporaries in the early 1950's organized the Federation of Islamic Associations in the United States and Canada (F.I.A.) with the idea of creating greater Islamic cohesiveness in North America.

At the same time that Igram was promoting Islamic unity he was just as busily heading a drive to build a Young Men's Christian Association branch in Cedar Rapids. "I was president of the Islamic Federation and the Y.M.C.A. at the same time," he says. But since coexistence and tolerance are strong traditions within the histories of both Islam and America, perhaps that should not be so surprising coming from a Muslim from Iowa.

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