CLOCKS THROUGH THE AGES



Records indicate that the first mechanical clock was built around 1630. It was made of iron, with a 500pound weight, a gear train and one hand showing the time. A crude device called the 'crown wheel and foliot" controlled its motion. The clock erred by about two hours a

Galileo proved in 1583 that necessive swings of a pendutum take place in equal inter-vals of time. In 1656, Christian Huygens used the pendulum to control the rate of motion of a weight-driven clock. With the addition of the escapement designed by Robert Hooke, pendulum clocks became accurate timekeepers for the first time.

Pendulum clocks for the home were brought to perfection during the "golden age of English clockmaking" (from about 1680 to 1820). First, the brass movements were covered by hoods with the pendulum and weights exposed. Later they were in tall floor or hall cases, which were nicknamed "grandfather." The minute hand was added to the dial before 1680. A few years later, the second hand was added.

These tall clocks were equipped to strike the hours. Some also had chiming and musical attachments as well as moon phases and calendars. They were so exact that the principles of design and construction have remained unchanged after 280 years. American clockmakers of the 18th and 19th centuries produced many attractive types of grandfather clocks.

Today Bulova updates a classic pendulum clock into an ultra-modern electronic wall timepiece. The stark white, recessed case is crisply contrasted with an ebony face. Numerals are not to be found anywhere. . .instead, radial lines cut the dial's surface and a circle of white indicates the 12 o'clock position. The cord has disappeared as well... the electronic movement operates on a standard flashlight battery for more than a year.

When it comes to handsome decoration as well as telling time, this clock is sublime.

How To Participate In Nation's Birthday

duced by The Hamilton Mint for Arlington Heights, Illinois, one of four designs to be featured through 1976 in that com-munity's celebration of the American Bicentennial.

ARLINGTON HEIGHTS, ILL. - The Hamilton Mint, one of

the nation's leading private mints, has developed a special bi-centennial mintage program whereby smaller communities can participate in the nation's birthday celebration through July, 1976.

Coins, medals, and commemorative medallions will be pro-

duced for communities work-

ing from their designs or

photographs, or using designs developed by Hamilton, ac-cording to Robert Raymas, ex-

ecutive vice president of the

Hamilton plan, can offset costs

of their celebration through

in order that more local or

smaller communities can join

in this national event without

the usual start-up expense as-

sociated with die manufacture

in fine medallic mintage," Ray-

He explained Hamilton Mint

marketing program shows

each community how it can develop working capital for other activities that they are

Rayunas said the Mint would

cal societies, bicentennial com-

memorative groups, as well as

working with local histori-

"We are extending this offer

sale of the medals.

unas said.



EXXON SUPPORTS URBAN LEAGUE - HOUSTON-During the visit of National Urban League Executive Director Vernon Jordan (left) to Houston to address the 33rd annual convention of the National Newspaper Publishers Association, he was presented with a \$60,000 check for the programs and operations of the League by R. H. Herman (center), Senior Vice President of Exxon Company, USA, and James E. Queen (right), Exxon USA Community Relations Coordinator. Mr. Jordan's speech highlighted the Publishers' annual conference. The gift represents Exxon's

continued support of the League since 1946 with contributions totalling more than one-half million dollars. Programs of the Urban League are concerned with education, employment, and training opportunities and the maintaining of positive intergroup relations.



FSU RECEIVES \$1,000 ALUMNI GRANT Fayetteville State University's New York Alumni chapter presented a grant of \$1,000 to the institution yesterday. The

scholarships and athletics-\$500 each. Making the presentation to Fayetteville State University on behalf of the New York FSU chapter is A native of Richmond, Va.,

grant has been earmarked for

Mrs. Fannie Graham (center). With Mrs. Graham are Dr. William Bell, Athletic Director (left), and Dr. William C. Brown, Vice Chancellor of Academic Affairs.

Samuel Graverly To **Become Admiral** Korean War and Vietnam. Flotilla Commander His home port will

WASHINGTON - Rear Adm. Samuel S. Gravely, the Navy's only black flag officer, will become commander of a cruiser-destroyer flotilla this month, the Pentagon

bilities of a full service Mint. announced Friday. 2. No preliminary cost and This will be the first time a no monetary commitment. black has commanded a naval The program's proceeds are a major fund raising tool. force of this size, about 30 Further information about this unique bicentennial mintships, a Pentagon spokesman

age program can be obtained Gravely currently holds a by writing Department BC, The Hamilton Mint, 40 East senior communications University Drive, Arlington position on the Navy Heights, Illinois 60004. headquarters staff.

the 51-year-old Gravely came up from the ranks and has seen service in World War II, the

In addition to hiring, training, and upgrading disadvantaged workers the U. S. Labor Department's JOBS program has expanded employment opportunities for Vietnam-era veterans.

HEW

(Continued from FRONT Page)

Administration's revenue sharing concept, however, does not apply to these programs but rather lumps the funds together and allows the states to determine how the funds should be spent.

Under a reorganization of the Health Services and Mental Health Administration, an agency of the Department of

HAWLEY

(Continued from FRONT Page) national educational association, past president of Phi Beta Sigma fraternity and chaplain of the H. V. Brown Schoolmasters Club. **CLUB AWARD**

During the luncheon honoring the retiree, Mr. Hawley was presented the Brown Schoolmaster's Club award in recognition of outstanding service in the North Carolina public school system, 1935-1973. He was also awarded a service plaque by the Wayne County Board of Education and another by the Parent-Teacher-Student Association of Carver Elementary School for "12 years of devotion and duty to the children of Wayne

County." The Rev. Mr. Hawley is a native of Oxford, a son of the late Mr. and Mrs. Willie Hawley of Oxford. He is one of six living children of his parents, three of whom had careers in education. A brother, Cheslie resides in Richmond, Va., and is a retired teacher. The four sisters are Miss Bernice Hawley of New York City, a teacher, Estelle Hawley of Oxford, also a teacher, Mrs. Ida Parham of New York, a housewife and Mrs. Daisy McCrimmon of Oxford, a beautician.

Mr. and Mrs. Hawley have three children, who including a foster son, Samuel Cox, are all educators. The daughters are Mmes. Helen Edwards of Durham, who teaches public school music, and Frances Stephens of Hyattsville, Md., a researcher on the staff of Rep. Ike Andrews of the Fourth North Carolina District.

Health, Education and Welfare, the child and maternal health

"There is no place for me in that kind of business," Lesser, head of federal health services for children and mothers since 1952 and associated with the programs since 1941, said. However, at age 63, Lesser said he is not ready to retire. "But I certainly wouldn't continue as a figurehead or exhibit A in

which I thoroughly

'World's Largest Circus" rolls

into town on a colorful fleet

of over 30 trucks, accompanied

by the tune of roaring ele-

phants, an assortment of lions. tigers and cheers of onlooking

The barren field where the

Clyde Beatty-Cole Bros. Circus

magical aura as the trucks un-

Circus folks often describe

their show as a "Modern Mir-acle in Motion" — a phrase

that, despite its ring, is more

By early spring of each year,

the circus moves north from

its winter headquarters at De-

land, Fla., on a cross-country tour that brings old-time cir-

cus thrills to millions of Amer-

icans, young and old, in nearly

200 communities. Most are

Pulling up stakes every day

becomes an accepted way of

life for performers and ani-

mals alike. Each move in-

volves the handling and trans-

porting of a huge canvas tent as big as a football field; pro-

viding seating facilities for

ing for a menagerie of 12 ele-

phants, a hippopotamus, sev-eral apes, lions, tigers, camels,

llamas, zebras, dogs, ponies, horses and even trained pigs.

It also means working with a

staff of several hundred -

some of whom are as temper-

mental as any Hollywood star;

operating complete dining fa-

cilities; maintaining three die

sel power plants capable of producing enough electricity to light a small community; and furnishing a complete me-

Twice a day, crowds hear the familiar chant of "Hurry, hurry, folks, step right up and

show." Then, late at night, the

tents and all bright parapher-

nalia, animals and performers

move on to the next town — by truck and house trailer.

Meeting this 24-hour sched-

ule, the American Trucking As-

sociations reports, week in and week out takes a dedicated staff and a reliable and flexi-

ble form of transportation. According to some old circus

hands, trucks may well have proved the single most signif-

see the world's most ama

chanics shop.

more than 4,000 persons;

covered in one-night stands.

than huckster hyperbole.

load and tents begin to rise.

youngsters - of all ages.

There are many facts concerning the gains made by black Americans since 1910, when the NAACP was formed, when the NAACP was formed, were aged 60.8 years. The gap women live longer, But for

in the field of education, political power, income, and occupations in comparison with whites. I suggest that all these gains can be measured and summed up by actual well being. The best objective test of well being is health,

longevity.

How have black Americans

fared in this respect? Here are the facts. In 1909 the average length of life for white was 52.5 years; for Negroes only 35.7 years. The difference was 47%. In 1930 the longevity for whites averaged 61.4 years, and for Negroes 48.1 years, a

white longevity was 69.0 years and the Negro life span averaged 60.8 years. The gap was down to 13.5%. By 1958, whites lived 70.3 years on an longevity, this is not average, and Negroes 63.0 years; the gap being closed to 11.6%. In 1969 the life expectancy at birth for whites was 71-1/2 years, for Negroes 64-1/2 years. The gap was 10.8 years. (Figures from Statistical Abstract of the U. S. -1973). Put in another way, while whites gained 36% in life, expectancy from 1909 to the latest figures available, black Americans gained a very much

larger 80% The figures for white and black longevity are derived by averaging the life expectancy

important, because both white and black women live longer than white and black men.

The fact that there is still a gap of between 10% and 11% is life expectancy is not because Negroes are not healthy and

The textile industry, with more than 7,300 mills concentrated largely on the east coast, is the ninth largest employer in the country, according to the U. S. Department of Labor.

A Better Way TO SAVE YOU TIME AND MONEY

HOW TO BUY A RANGE

explain the different kinds of

automatic cleaning; then decide

matic cleaning, then look for

easy-to-clean features like foil or

teflon liners, removable door,

which one is best for you. If you choose not to buy auto-

rack guides, and panels.

features such as these:

ence if you act as a p

chauffeur for your family. If the

range has an automatic clock, it

may also have a timed outlet,

which lets you start small

appliances automatically at a

specified time. It's handy for hot

able broil control, which lets you

select rare, medium or well-done

and eliminates the need for

adjusting the rack level. Not all

ranges come with a broiler pan

so ask if the oven you're con-

Some ranges have an adjust-

coffee in the morning.

By knowing what is available in ranges before you shop, yours will be a wise purchase . . . not a snap judgement made on the sales floor.

Ask yourself these questions before you shop:
1. Which fuel? If you plan to change fuels, ask the utility for

an estimate of conversion cost, Plumbing and re-wiring can be expensive. Also ask what the new fuel is likely to cost each month.

2. Free-standing or built-in? Free-standing ranges are finished on the sides and back, and can be moved from place to place. If you move often, you may want to consider this type.

Built-in ranges (including setins, wall ovens, cook-top surface units, and drop-ins) are unfinished on the sides and back and are designed to be built in permanently in a specified

If you are replacing a freestanding range, you may want to remodel your kitchen for built-in appliances. By building in your range, you can design a kitchen to fit your needs-wall ovens can be placed on a com-fortable height for you; or in a separate place from a cook-top surface unit.

3. What size? Measure the space in your kitchen allotted for a range before you go shopping. Free-standing ranges are available in widths of 12, 20, 24, 30, 36, and 40 inches. A smaller size range does not necessarily mean a smaller oven or less surface units; often the difference is Larger ranges have more stor-

work surface on top. If you are replacing a built-in range, then correct measurement is critical; if you don't buy one the same size, you will have to do some remodeling . . , which

can be costly. 4. Is it easy to clean? Ovens that clean automatically are becoming more and more popular. These ovens generally cost \$30 to \$90 more than non-automatic cleaning ovens. Even though these ovens cost more. the convenience and time saved will probably be worth it when you consider the amount saved

by not purchasing chemical oven which signals when the meat is eaners. Ask the salesman to

If the range has a window in the oven door, then it is easy to check "doneness" without open-ing the door. Some self-cleaning ovens do not have windows in the door. A fast pre-heat means less

waiting for the oven to heat. Look for easy-to-clean fea-Some ranges have food warmers to keep just-cooked foods warm. tures on top of the range, too. One-piece drip pans, removable knobs or knobs that are easy to Some surface units heat up faster and have many heat clean around will save you time. settings. Ask the salesman if 5. What features do you need there's a difference among the ones you're looking at. Size of and which will you use? If you shop and compare several modsurface units may be important els and brands, you will find a to you if you cook in large range that fits your cooking needs. You'll need to decide on quantities . . . then you might

want larger surface units. Another decision to make will A minute timer that reminds be if you want one or two ovens. you when a dish is ready or an With two ovens you can cook at auomatic clock that lets you set two different temperatures at the oven to start and stop at make same time or bake and specific times can be a con-a broil at the same time.

After you ve co features and type of range best suits your needs, then start shopping. Don't hesitate to ask the salesman all questions that come to your mind when you are looking at a particular range. Ask him to explain the warranty . . . what it does and does not

cover. For free answers to questions about buying a range, or about buying, using and caring for any of your appliances, write to Consumer Service Department sidering does. Some ranges have a rotisserie, and some have an bor, Mich. 49022. They promise automatic roast thermometer, to answer all letters,

Be OF Travel

in their minting program,

which can extend over a four

year period.

In the case of its own com-

munity, Arlington Heights, The

Hamilton Mint, in cooperation

with the city's Historical So-

ciety, is issuing four limited

edition medals through 1976

struck in 24-karat gold on sil-

ver, in fine silver, and in

Important points of the pro-

1. To provide marketing ad-

vice and manufacturing capa-

gram are these:

In Canada This Year: Five Celebrations Provide Entertainment



The vision can appear out of

It's you - sunning on a sandy beach, dining in a luxurious restaurant, climbing a mountain, watching a rodeo. For just a moment, the world comes to a halt and you think to yourself: "That's what I'd like to do this year!"

And the place to do it, in 1973, is Canada. It's always a great country to visit, but this year is something special. Five major birthday celebrations guarantee the vacationer first class entertainment wherever he goes. The welcome, at such festive times, is always a little warmer, the preparations and facilities for visitors a little more complete. ens and facilities for So this summer take your freem vacation and, at the same

time, join a birthday party.
If it's sun, see and sand you crave, go to Prince Edward Island, celebrating, in 1973, 100 years as a Canadian province. Canada's smallest province has some of the finest ocean beaches

in North America. Is history your subject? Then, the city of Kingston, celebrating its tercentenary, is the perfect apot. Historic sites in this part

of Ontario are numerous. Maybe you crave advanture.
Try the Yukon Territory in northern Canada. Seventy-five years ago, this vast wilderness was the site of a mammoth Gold Rush. This year, the Yukon recalls its spectacular be-



If you yearn for lots of fresh clean air and pastoral country side, and have a passion for the pipes, Nova Scotia is definitely for you. Pictou County is mark ing the 200th anniversary of the arrival of the Hector, a barque that brought the first wave of Scottish settlers to that province. Festivities will lean heavily toward things Scottish.

The biggest birthday is the one being held for the Royal Canadian Mounted Police celebrating 100 years of diligent police work, 100 years of pomp and pageantry. Their party is nationwide. All 10 provinces, the Yukon and Northwest Territories are getting in on the act with a wide variety of special

events. RCMP Centennial Review. featuring the inter-nationally famous Musical Ride, the RCMP Band and Choral Group, will tour the country

stopping in every province.

Wherever you go and whatever you do, you will find Canada is a superb vacation land. You can golf, swim, bird watch, hunt for rocks, loaf, visit museums or brave the

You can visit sophisticated exciting cities. Toronto, Onpolitan restaurants, fine mu-seums and theaters make it a year-round favorite with

Historic Quebec City breathes a romantic old-world atmos-



phere and boasts some of the best restaurants on the continent.

Vancouver, with its sunwashed beaches and magnificent mountain setting, is ideal for

outdoor enthusiasts You can see beautiful countryside, sparkling lakes, lush green forests. Just drive all or part of the 5,000-mile Atlantic-to-Pacific Trans-Canada Highway, or the more northerly Yellowhead Route through the western part of the country. Well kept scenic campgrounds and picnic

Any season is the right season for holidaying in Canada. Summertime temperatures, in most parts of the country, are pleasantly warm for swimming, boating and camping. The blazing colors of the fall

areas are frequent.

artists, photographers and nature lovers. Winter means snow, crisp, cool air, carnivals, skating, hockey, and some of the best

foliage in eastern Canada delight.

skiing in the world. Spring marks the return of leaves and blossoms that fell in the autumn. Flower festivals proliferate — apple blossoms in the Annapolis Valley of Nova Scotia, tulips in the national Ottawa.

Visit Canada in 1973 and make that "dream vacation" real. For further information write the Canadian Government Travel Bureau, Ottawa, Canada

programs staff would be cut-from 160 to six or seven and the remaining personnel would be given additional duties with other programs, Lesser Charleston, S. C. charged.

support of a reorganization of

disapprove," he said.

"World's Largest Circus" Comes To Town By Truck

Open for business bright and early, the ticket truck can always

expect early arriving circus buffs. icant factor in keeping the "Big Tops" alive.

In 1956, the owner of another circus proclaimed that the "tented circus is a thing of the past." Frank McClosky, associate owner of the Clyde Beatty-Cole Bros. Circus, disagreed. That same year, he bought the show and moved it from the railroads to the highways. Using trucks, he booked the circus into many towns where there are no rails and made it possible for many more people to see the big show near their homes. The packed stands, the laughter and cheers all prove - twice a day - that he was right.

Watching the circus set up is a show in itself. Trucks are both the work-horses and stars in this exciting part of circus life. For example, the stakedriver truck has streamlined

the chore of setting up the "Big Top." Approximately 400 stakes must be driven each time the show sets up — using two types, steel for blacktop and other hard surfaces, and wooden ones for the ground.

One of the show's most important vehicles is the spool truck. A large spool mounted in a flat-bed truck mechanically rolls and unrolls the huge canvas tent. This innovation was first introduced in 1946 by the Al G. Kelly and Miller

Issued new each year, the canvas is supported by four center poles, 55-feet high, with 20 long and 30 short quarter poles and 72 sidewall poles. All are cut from a special alloy for extra strength and lightness and are, of course, transported in the pole truck. This truck also doubles as a



Trucks may be the means by which today's circus stays alive,

the performance.

There is an office wagor containing the ticket office and a small office, with an arm-gate that folds down in front of the entrance before show time and folds up, on the top of the truck, when it is on the road.

Eight seat wagons provide folding chairs for reserved ticket holders and benches for the general admission audience. The benches are built on a flatbed trailer so that they can be unfolded for the per-formance and folded back down as soon as it is over. This single innovation substance to the feeling that the circus "fades away" right after the last show.

One tractor-trailer carries "Big Otto," the hippopotamus; another is home for a gorilla, and two provide a stage for such side-show features as "The World's Smallest Lady," "Baron Sword Swallower," and "Serpentina, The Snake Trainer." One side of each trailer unfolds, making a narrow porch the length of the vehicle. Two side wings, de-corated with bright, descrip-tive billboards, complete the

The cook house, another modified trailer, carries supplies and equipment necessary prepare meals for the crew, as well as the dining tent and

its tables An expert mechanic travels with the show, and one trailer has even been converted into a moving garage. It is stocked with an impressive inventory of parts, including tires and complete engines. If one of the show trucks should "blow an engine" during the tour, it can be repaired and back on the road within hours.

Two "sleeper trucks" are equipped with bunks for the crew and, of course, one converts into a concession stand, where the inevitable popcorn, hot dogs and cotton candy are sold.

Today's circus is more than entertainment — it is a feeling, an experience that might have been lost forever. The "mir-acle in motion" of the truck has given circus life a new zest and it remains a continuing part of Americana.