

**INTERESTING
INSTALLATIONS**

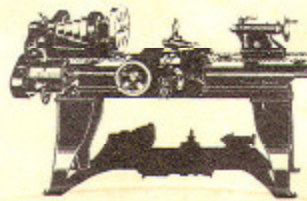
OF

South Bend Lathes

SOUTH BEND LATHE WORKS

499 East Madison Street

South Bend, Indiana, U. S. A.

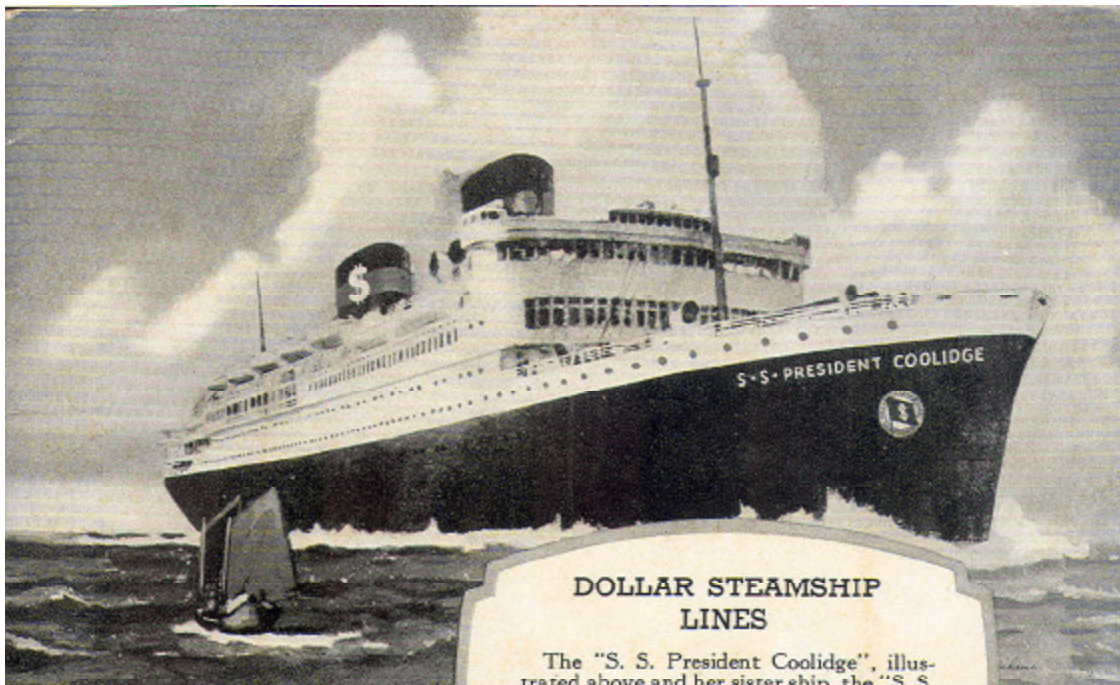


Interesting Installations of South Bend Lathes

In this bulletin are shown some interesting installations of mechanical equipment in outstanding manufacturing plants, government shops and scientific laboratories where the South Bend Back-Geared Screw Cutting Precision Lathe has been selected as part of the equipment.

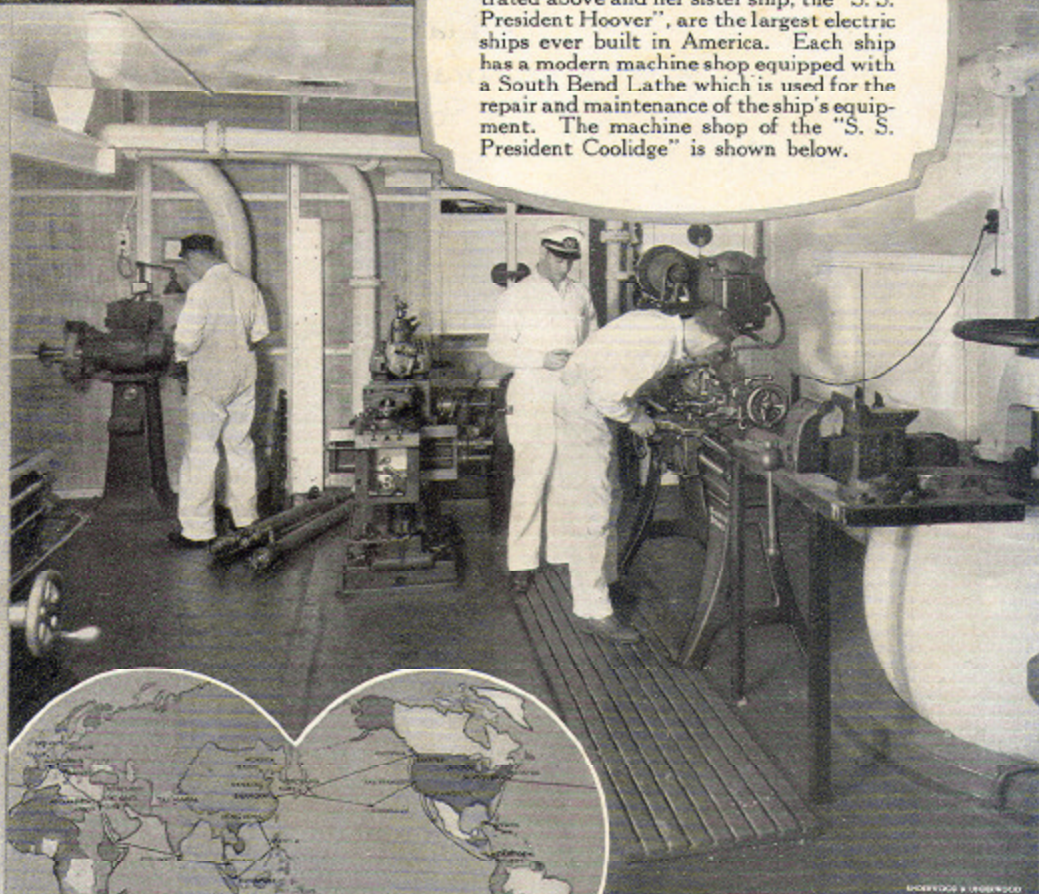
South Bend Lathes are used in a wide range of industries—large and small, in manufacturing and production work, and in the tool room where the finest accuracy and precision is required.

We have been building Back-Geared Screw Cutting Precision Lathes since 1906. Today the South Bend Lathe is one of the best known and most widely used lathes in the United States—more than 65,000 of them are in shops and plants throughout the U. S. A. and 96 countries and colonies over seas.



DOLLAR STEAMSHIP LINES

The "S. S. President Coolidge", illustrated above and her sister ship, the "S. S. President Hoover", are the largest electric ships ever built in America. Each ship has a modern machine shop equipped with a South Bend Lathe which is used for the repair and maintenance of the ship's equipment. The machine shop of the "S. S. President Coolidge" is shown below.



Above—Machine shop aboard the
"S. S. President Coolidge."

Left—The Dollar Steamship Lines
serve the world, calling at 22 ports in
14 countries.



POPULAR MECHANICS CO.

Chicago, Illinois

The illustrations here show the Mechanical Laboratory of Popular Mechanics Magazine. The development of the editorial matter appearing in this popular magazine is helped along by the use of a South Bend Lathe.

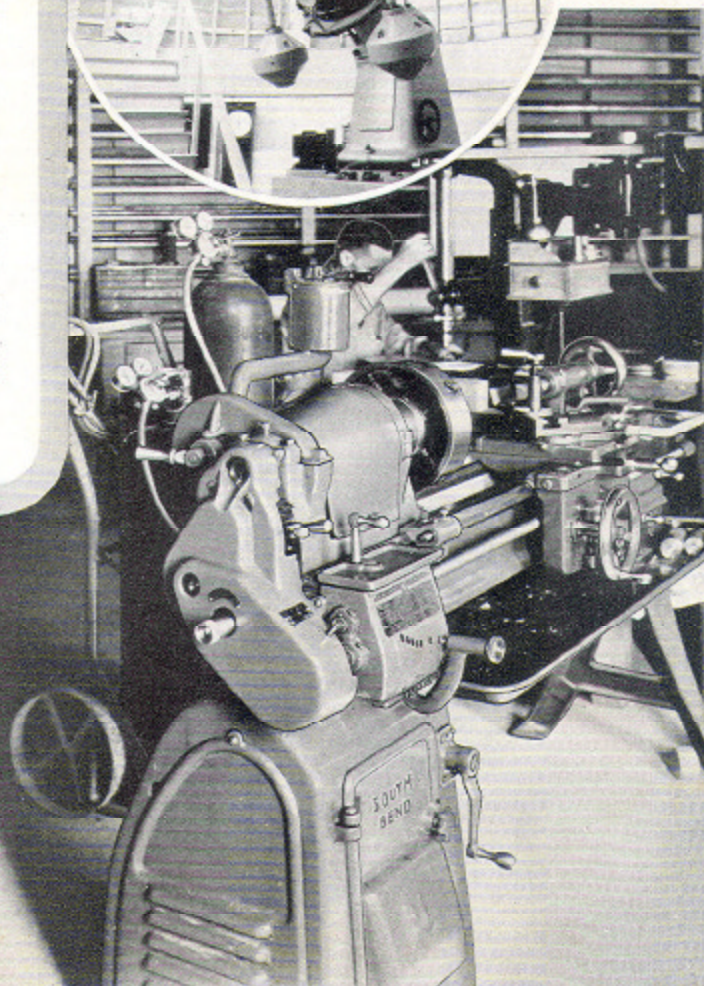
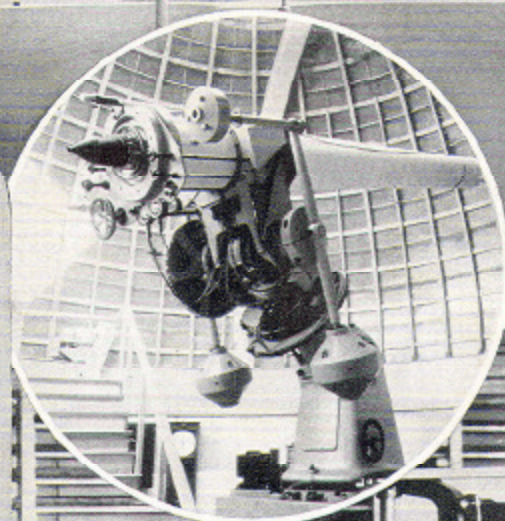




GRIFFITH OBSERVATORY

In the hills of Hollywood, California, this up-to-date observatory, a part of the California Institute of Technology, is carrying out extensive studies in astronomical research. Much of their work requires special equipment, which must be made in their shop to suit their own requirements.

The illustration below shows a view of the shop at Griffith Observatory. Their South Bend Lathe with other high quality, precision shop equipment has assisted in carrying out the highly specialized work at this institution.





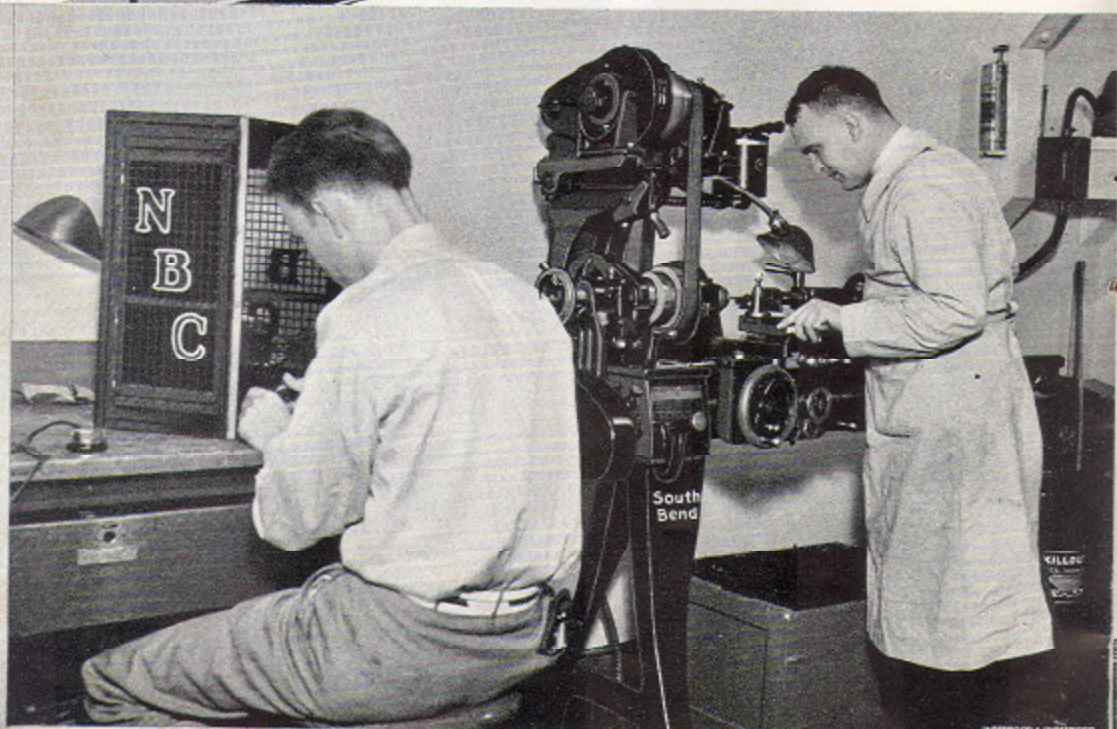
At Right—One of the
NBC Studios in
Chicago.

Below—The Merchandise
Mart building,—
Chicago home of NBC.



THE NATIONAL BROADCASTING CO.

Radio broadcasting, which undoubtedly has been carried to its greatest development through NBC, requires mechanical and electrical apparatus never heard of 20 years ago. It has been the privilege of the South Bend Lathe Works to equip the mechanical laboratories of scores of the broadcasting stations throughout the world with South Bend Lathes. The illustration below shows an installation in the NBC maintenance and repair department in Chicago.





Above—Birds-eye view of Little America

With ADMIRAL BYRD

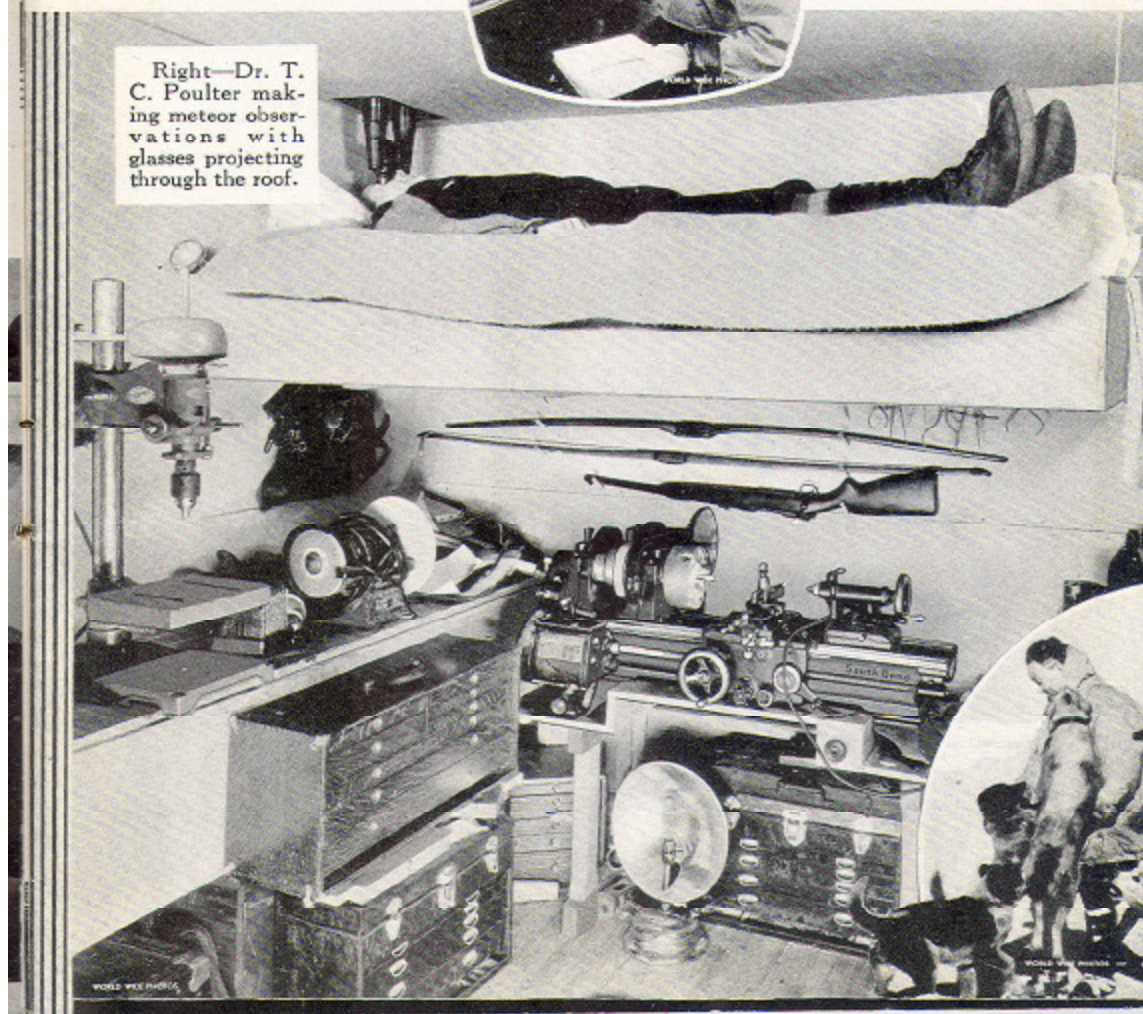
Modern Polar Expeditions of which Rear Admiral Byrd has conducted two to the Antarctic and one to the Arctic, are highly mechanized and require much mechanical equipment. For both Antarctic expeditions, the engineers and scientists selected South Bend Lathes to keep their instruments and equipment in first class condition. The photograph below shows the South Bend Lathe and other shop equipment in the quarters of Dr. Poulter, second in command of the 1934 expedition.

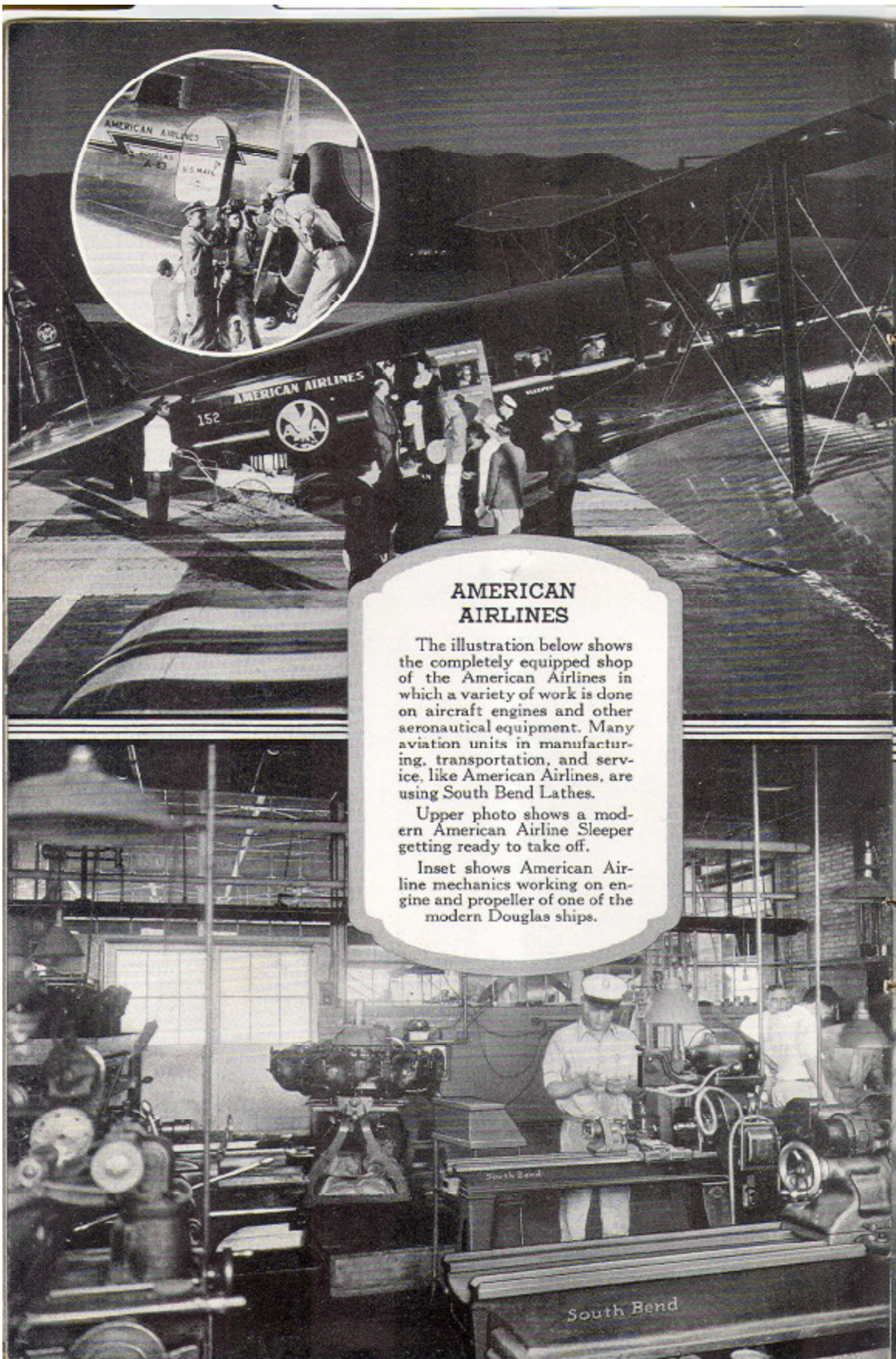


Left—Rear Admiral Byrd at his Advanced Camp.



Right—Dr. T. C. Poulter making meteor observations with glasses projecting through the roof.





AMERICAN AIRLINES

The illustration below shows the completely equipped shop of the American Airlines in which a variety of work is done on aircraft engines and other aeronautical equipment. Many aviation units in manufacturing, transportation, and service, like American Airlines, are using South Bend Lathes.

Upper photo shows a modern American Airline Sleeper getting ready to take off.

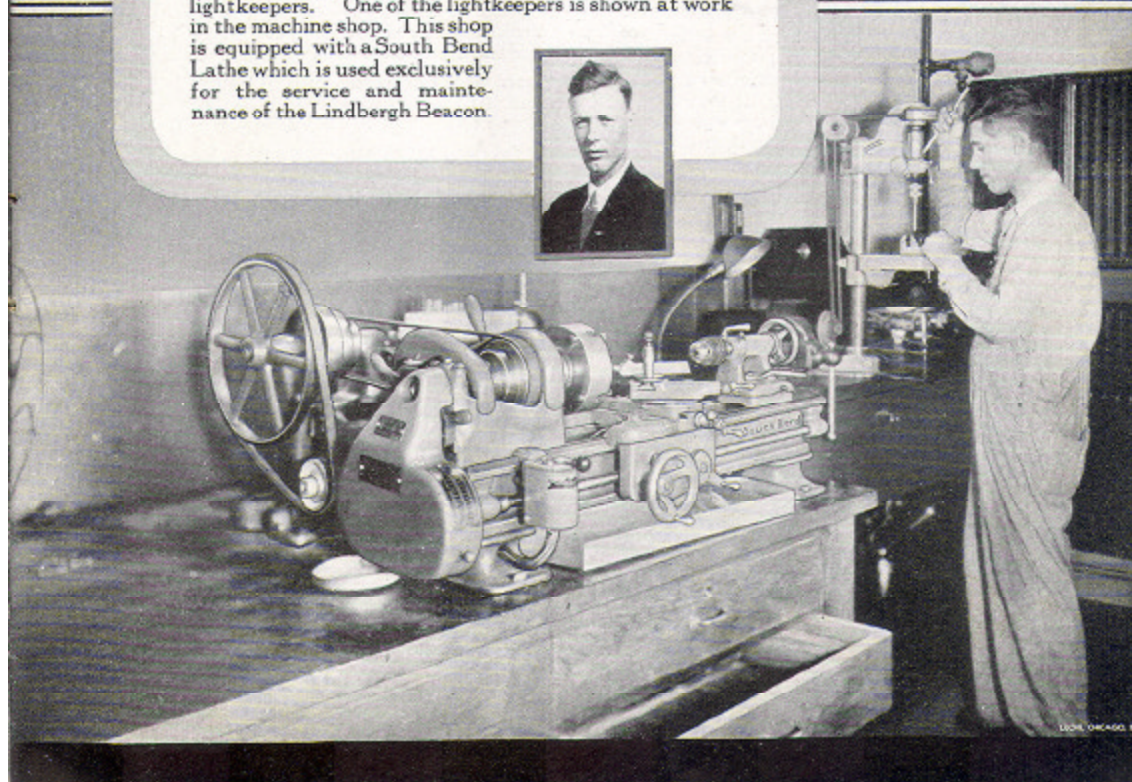
Inset shows American Airline mechanics working on engine and propeller of one of the modern Douglas ships.

The LINDBERGH BEACON

Palmolive Building, Chicago, Ill.

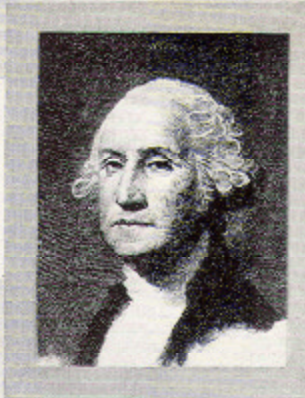
WORLD'S MOST POWERFUL BEACON

The Lindbergh Beacon, located atop the Palmolive Building, Chicago, Ill., is the most powerful aviation beacon ever built, having two billion beam candlepower. Can be seen for 250 miles. The beacon is in operation from dusk to dawn and requires the attention of two lightkeepers. One of the lightkeepers is shown at work in the machine shop. This shop is equipped with a South Bend Lathe which is used exclusively for the service and maintenance of the Lindbergh Beacon.



MOUNT VERNON

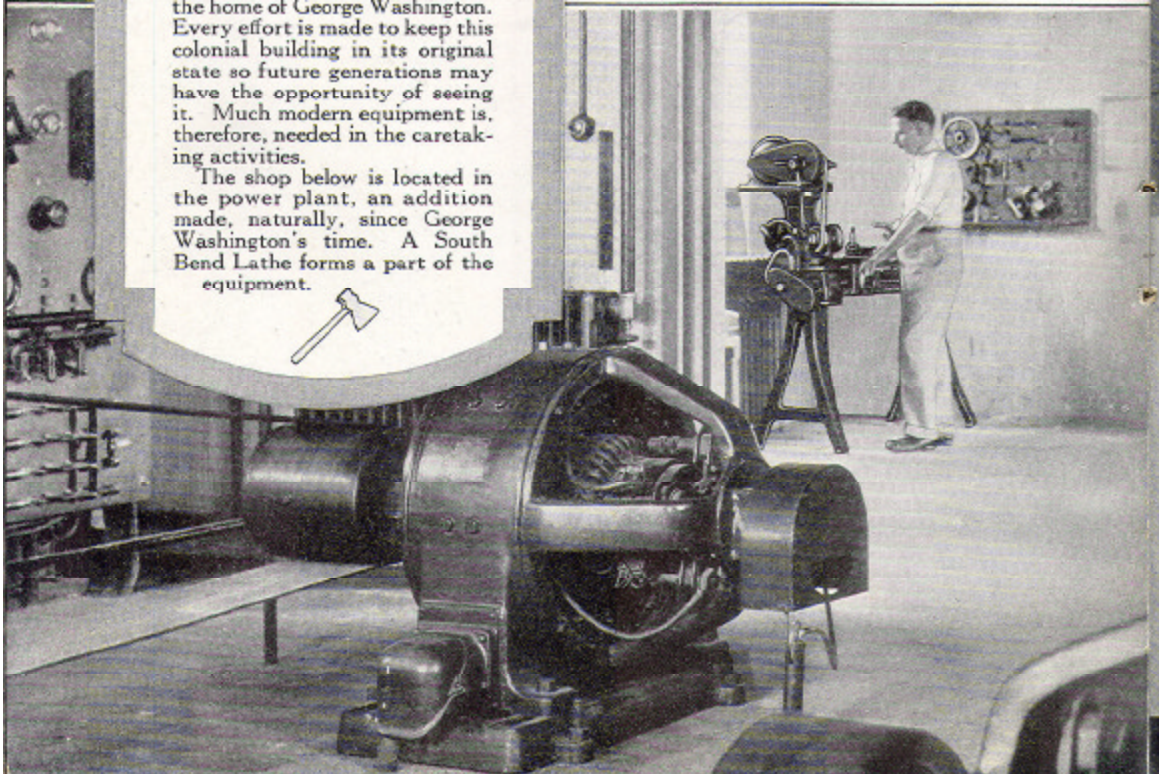
On The Potomac River, Virginia



MOUNT VERNON

One of the most interesting spots in the United States is historic Mt. Vernon in Virginia, the home of George Washington. Every effort is made to keep this colonial building in its original state so future generations may have the opportunity of seeing it. Much modern equipment is, therefore, needed in the caretaking activities.

The shop below is located in the power plant, an addition made, naturally, since George Washington's time. A South Bend Lathe forms a part of the equipment.

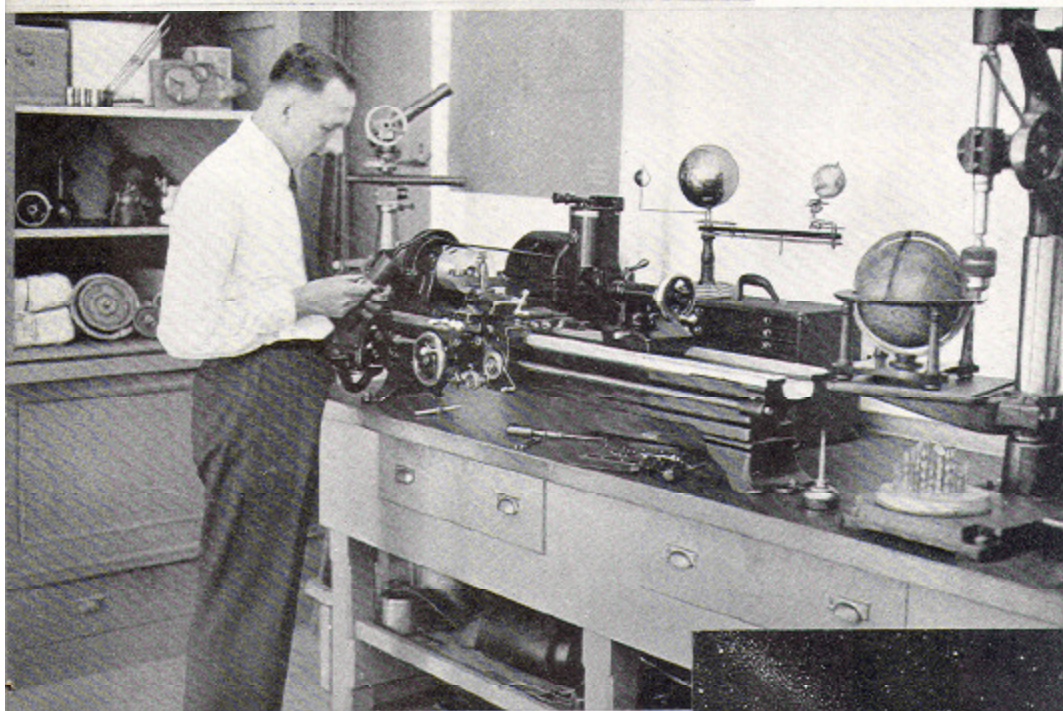


ASTRONOMY

For The Millions



Left—Exterior of the Adler Planetarium in Chicago, Ill.



ADLER PLANETARIUM

Chicago, Illinois

The mechanic's laboratory in the Adler Planetarium is in good part responsible for the maintenance and operation of the delicate and sensitive apparatus used in this institution. Much of their equipment is not available from other sources, and must be constructed here in this shop. As a consequence, a complete set of equipment, including a South Bend Lathe, cares for numerous and unique demands which arise.

The upper illustration presents an exterior view of the Adler Planetarium in Chicago. This was the first institution of its kind in the United States. Since its phenomenal success as an educational project, several others have been made available in the larger cities through the donations of public spirited business men.



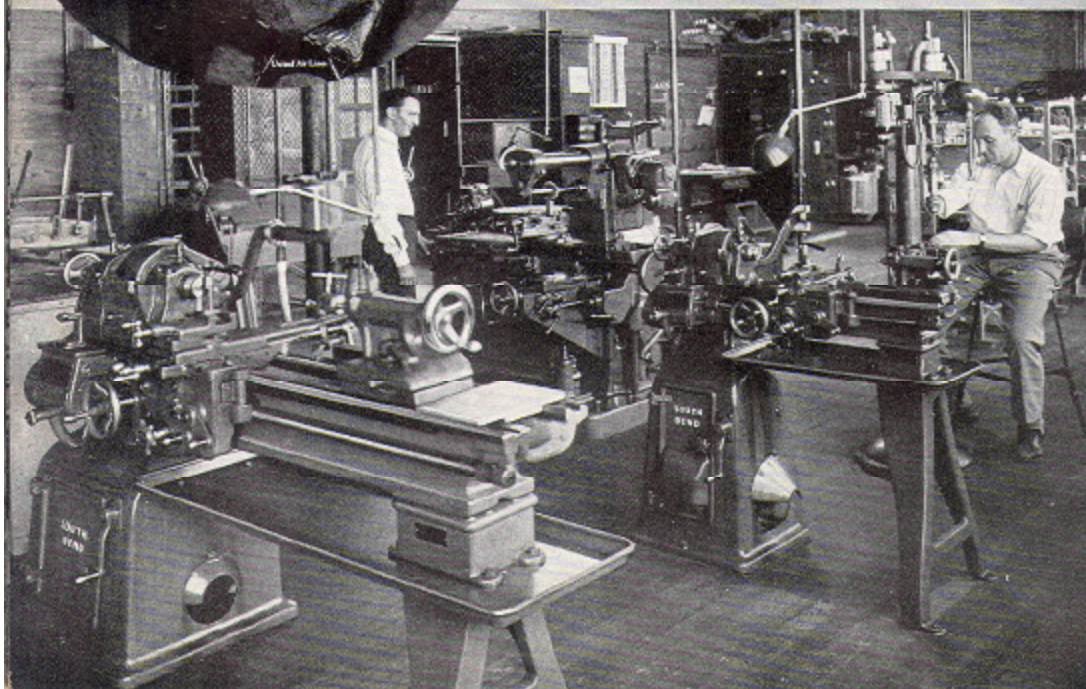
Above—The Zeiss Projector in Operation.

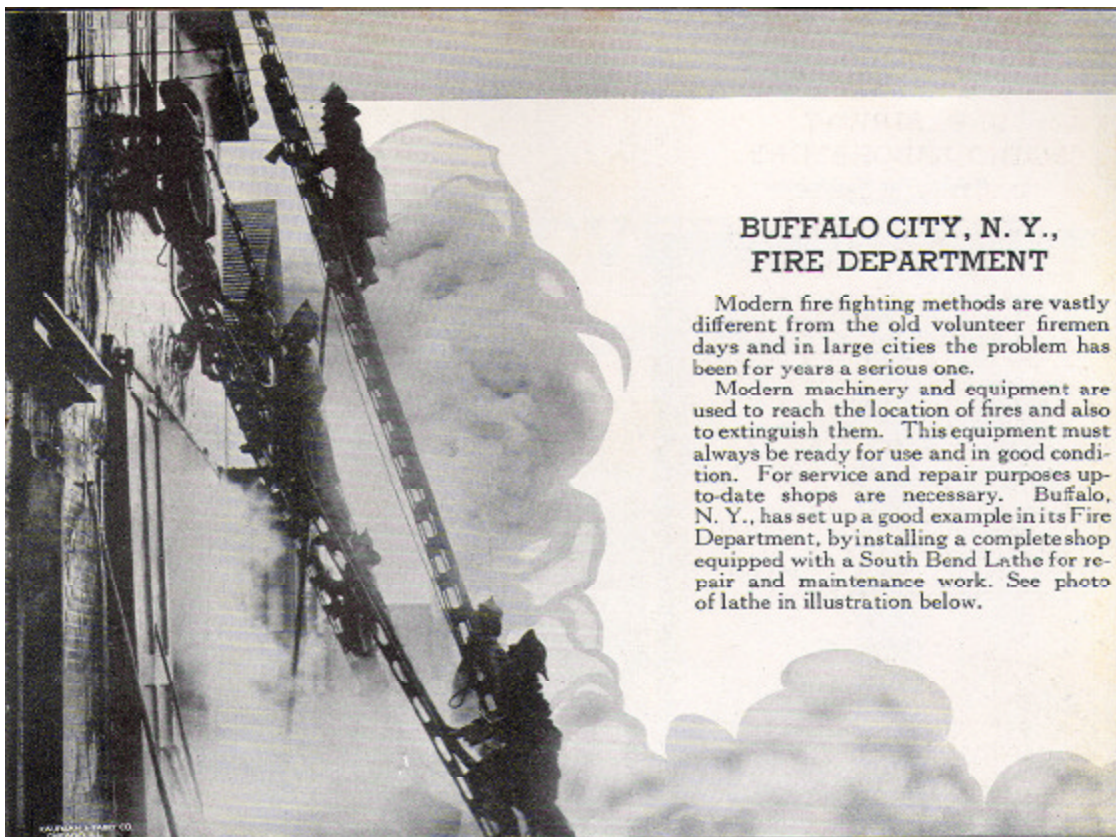
U. S. AIRWAY RADIO LABORATORY

U. S. Dept. of Comm.

A highly systematized service is rendered by the United States Government to aviators. Teletype machines distribute weather and flying data to air ports and flying fields. Radio service is used in many instances to inform planes in the air about conditions they will encounter. Direction radio beacons further eliminate hazards of flight.

In the well-equipped shop of the U. S. Airway Radio Laboratory, Chicago, Illinois, two South Bend Lathes are used for the construction, development and repair of special radio equipment for the Air Navigation Division, Bureau of Air Commerce. See photo of shop below.

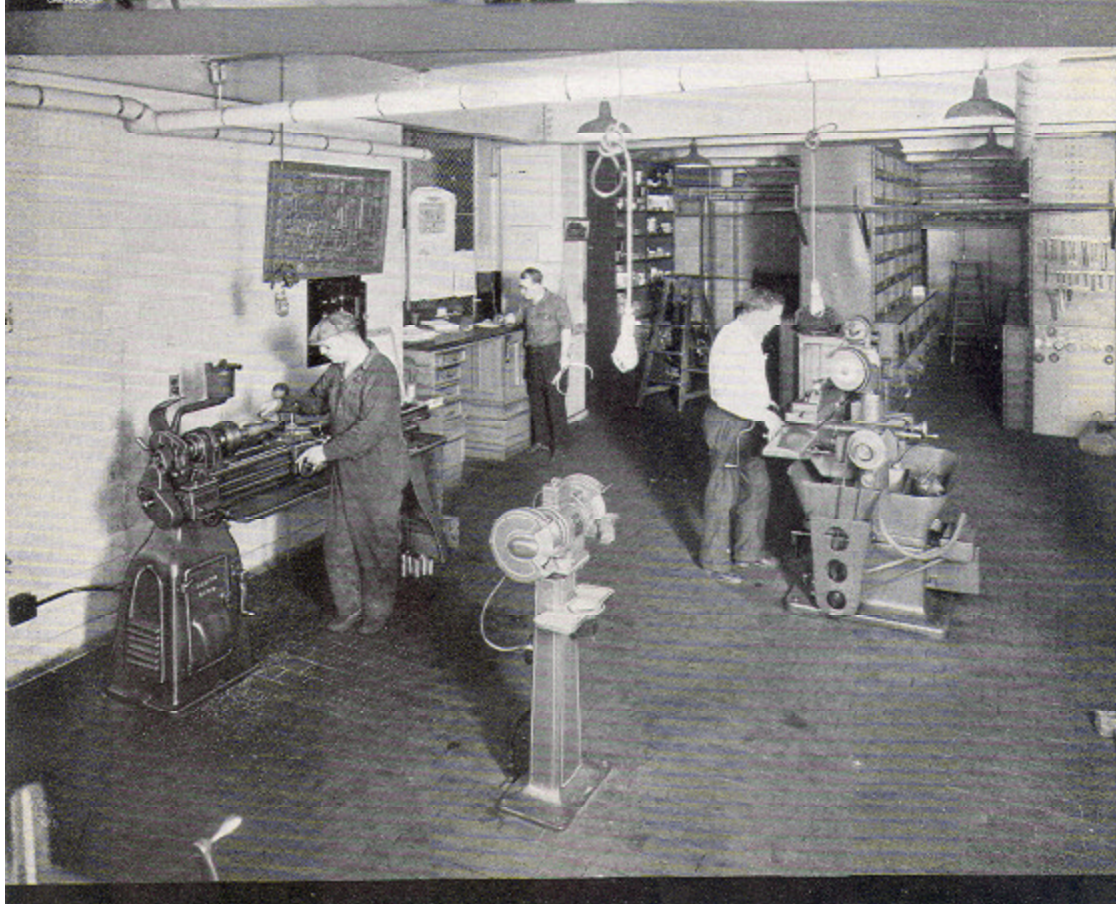




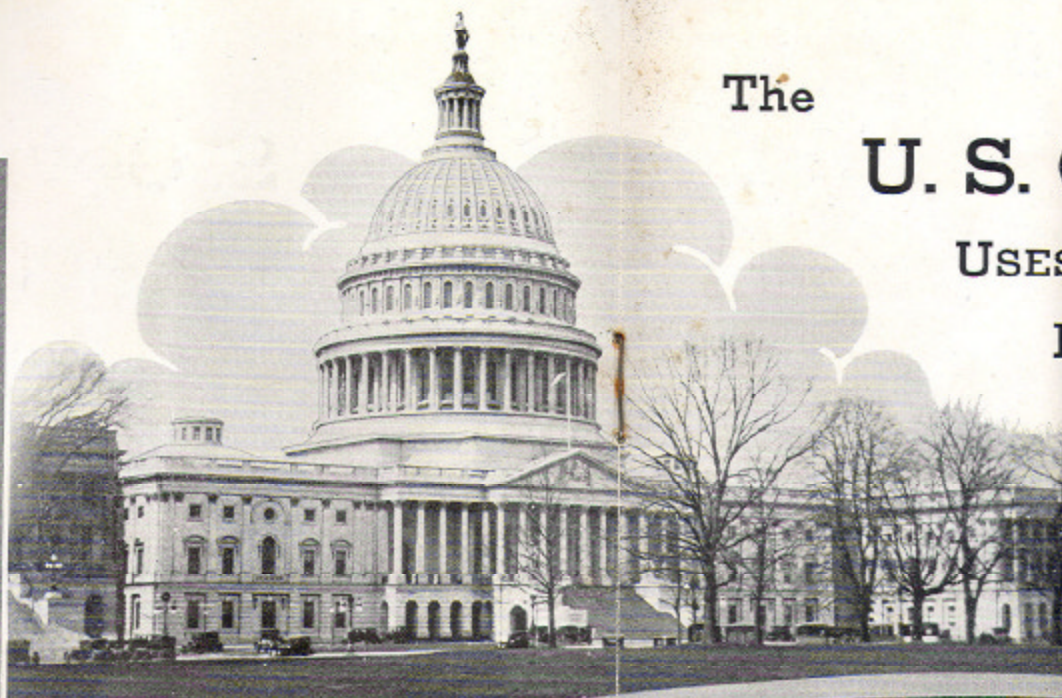
BUFFALO CITY, N. Y., FIRE DEPARTMENT

Modern fire fighting methods are vastly different from the old volunteer firemen days and in large cities the problem has been for years a serious one.

Modern machinery and equipment are used to reach the location of fires and also to extinguish them. This equipment must always be ready for use and in good condition. For service and repair purposes up-to-date shops are necessary. Buffalo, N. Y., has set up a good example in its Fire Department, by installing a complete shop equipped with a South Bend Lathe for repair and maintenance work. See photo of lathe in illustration below.



Below—The Washington Monument



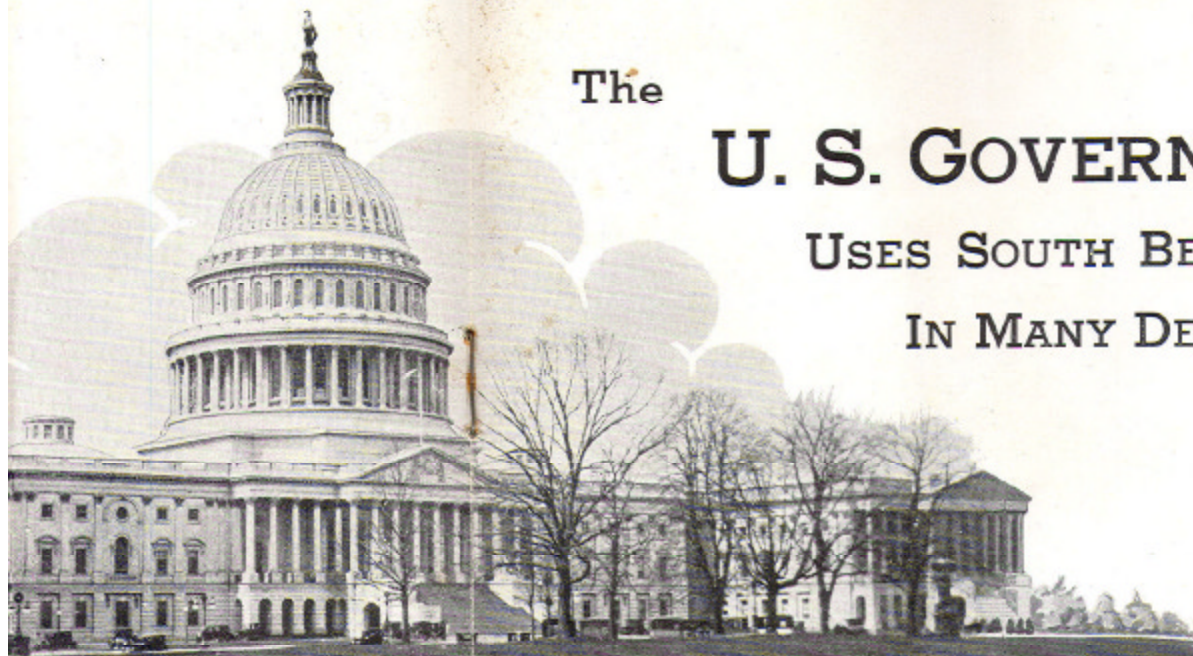
The U. S. C USES I

A PARTIAL LIST U. S. GOVERNMENT D Where More Than 400 South Be

Engineer's Office	Florence, Alabama	Reclam
Veterans Hospital	Tucson, Arizona	Naval A
Army and Navy Hospital	Hot Springs, Ark.	Marine
Navy Yard	Mare Island, Calif.	Coast G
Coast Guard	San Francisco, Calif.	Naval A
Reclamation Service	Denver, Colo.	Bureau
Department of Agriculture	S. Norwalk, Conn.	Public I
Coast & Geodetic Survey	Washington, D. C.	Navy Y
Terrestrial Magnetism Laboratory	Washington, D. C.	Engine
Geological Survey	Washington, D. C.	Marine
Navy Yard	Washington, D. C.	Militar
Naval Observatory	Washington, D. C.	Veteran
Treasury Dept.	Washington, D. C.	Coast G
Coast Guard Air Station	Miami, Fla.	Indian
Engineer's Office	Columbus, Ga.	Bureau
Reclamation Service	Rupert, Idaho	Coast a
Naval Training Station	Great Lakes, Ill.	Field A
Engineer's Office	Pecora, Ill.	Sequo
Signal Corps	Indianapolis, Ind.	Coast a
Soldiers and Sailors Home	Knightstown, Ind.	Forest 5
Inland Waterways Corp.	Dubuque, Iowa	United
Federal Penitentiary	Leavenworth, Kans.	Bureau
Engineer's Office	New Orleans, La.	Naval T
National Guard Armory	Augusta, Me.	Lighth
Naval Academy	Annapolis, Md.	Indian
Public Health Service	Perry Point, Md.	Air Dep
Coast & Geodetic Survey	Boston, Mass.	Comme
Fisheries Bureau Technological Lab.	Gloucester, Mass.	Marine
Naval Reserve Aviation Base	Detroit, Mich.	Navy Y
National Guard, Field Artillery	St. Johns, Mich.	Naval A
Engineer's Office	Warroad, Minn.	Marine
Red Lake Indian Agency	Redby, Minn.	Reclam
Engineer's Office	Pascagoula, Miss.	Veteran
Engineer's Office	New Madrid, Me.	Custom
Army Motion Picture Laboratory	St. Louis, Mo.	Lighth
Indian Agency	Fort Belknap, Harlem, Mont.	Grand T



Aerial View of
Gov't Buildings



The

U. S. GOVERNMENT

USES SOUTH BEND LATHES
IN MANY DEPARTMENTS

A PARTIAL LIST OF U. S. GOVERNMENT DEPARTMENTS Where More Than 400 South Bend Lathes Are Used

Engineer's Office.....	Florence, Alabama	Reclamation Service.....	Omaha, Nebr.
Veterans Hospital.....	Tucson, Arizona	Naval Ammunition Depot.....	Hawthorne, Nev.
Army and Navy Hospital.....	Hot Springs, Ark.	Marine Corps.....	East Jaffrey, N. H.
Navy Yard.....	Mare Island, Calif.	Coast Guard Air Station.....	Cape May, N. J.
Coast Guard.....	San Francisco, Calif.	Naval Air Station.....	Lakehurst, N. J.
Reclamation Service.....	Denver, Colo.	Bureau of Mines.....	New Brunswick, N. J.
Department of Agriculture.....	S. Norwalk, Conn.	Public Health Service.....	Ft. Stanton, N. Mex.
Coast & Geodetic Survey.....	Washington, D. C.	Navy Yard.....	Brooklyn, N. Y.
Terrestrial Magnetism Laboratory.....	Washington, D. C.	Engineer's Office.....	Buffalo, N. Y.
Geological Survey.....	Washington, D. C.	Marine Hospital.....	Stapleton, L. I., N. Y.
Navy Yard.....	Washington, D. C.	Military Academy.....	West Point, N. Y.
Naval Observatory.....	Washington, D. C.	Veterans Hospital.....	Azalea, N. C.
Treasury Dept.....	Washington, D. C.	Coast Guard Service.....	Wilmington, N. C.
Coast Guard Air Station.....	Miami, Fla.	Indian Agency.....	Turtle Mt., N. Dak.
Engineer's Office.....	Columbus, Ga.	Bureau of Entomology.....	Toledo, Ohio
Reclamation Service.....	Rupert, Idaho	Coast and Geodetic Survey.....	Port Dock, Ohio
Naval Training Station.....	Great Lakes, Ill.	Field Artillery School.....	Fort Sill, Okla.
Engineer's Office.....	Peoria, Ill.	Sequoyah Training School.....	Tulsa, Okla.
Signal Corps.....	Indianapolis, Ind.	Coast and Geodetic Survey.....	Astoria, Ore.
Soldiers and Sailors Home.....	Knightstown, Ind.	Forest Service.....	Portland, Ore.
Inland Waterways Corp.....	Dubuque, Iowa	United States Mint.....	Philadelphia, Pa.
Federal Penitentiary.....	Leavenworth, Kans.	Bureau of Mines.....	Pittsburg, Pa.
Engineer's Office.....	New Orleans, La.	Naval Torpedo Station.....	Newport, R. I.
National Guard Armory.....	Augusta, Me.	Lighthouse Bureau.....	Charleston, S. C.
Naval Academy.....	Annapolis, Md.	Indian School.....	Flandreau, S. Dak.
Public Health Service.....	Perry Point, Md.	Air Depot.....	Duncan Field, Texas
Coast & Geodetic Survey.....	Boston, Mass.	Commerce Dept. Airways Division.....	Ft. Worth, Texas
Fisheries Bureau Technological Lab.....	Gloucester, Mass.	Marine Hospital.....	Galveston, Texas
Naval Reserve Aviation Base.....	Detroit, Mich.	Navy Yard.....	Norfolk, Va.
National Guard, Field Artillery.....	St. Johns, Mich.	Naval Air Station.....	Norfolk, Va.
Engineer's Office.....	Warroad, Minn.	Marine Corps.....	Quantico, Va.
Red Lake Indian Agency.....	Redby, Minn.	Reclamation Service.....	Omaha, Washington
Engineer's Office.....	Pascagoula, Miss.	Veterans Hospital.....	Walla Walla, Washington
Engineer's Office.....	New Madrid, Mo.	Customs Service.....	Seattle, Washington
Army Motion Picture Laboratory.....	St. Louis, Mo.	Lighthouse Bureau.....	Milwaukee, Wisc.
Indian Agency.....	Fort Belknap, Harlem, Mont.	Grand Teton National Park.....	Moose, Wyo.



Aerial View of
Gov't Buildings

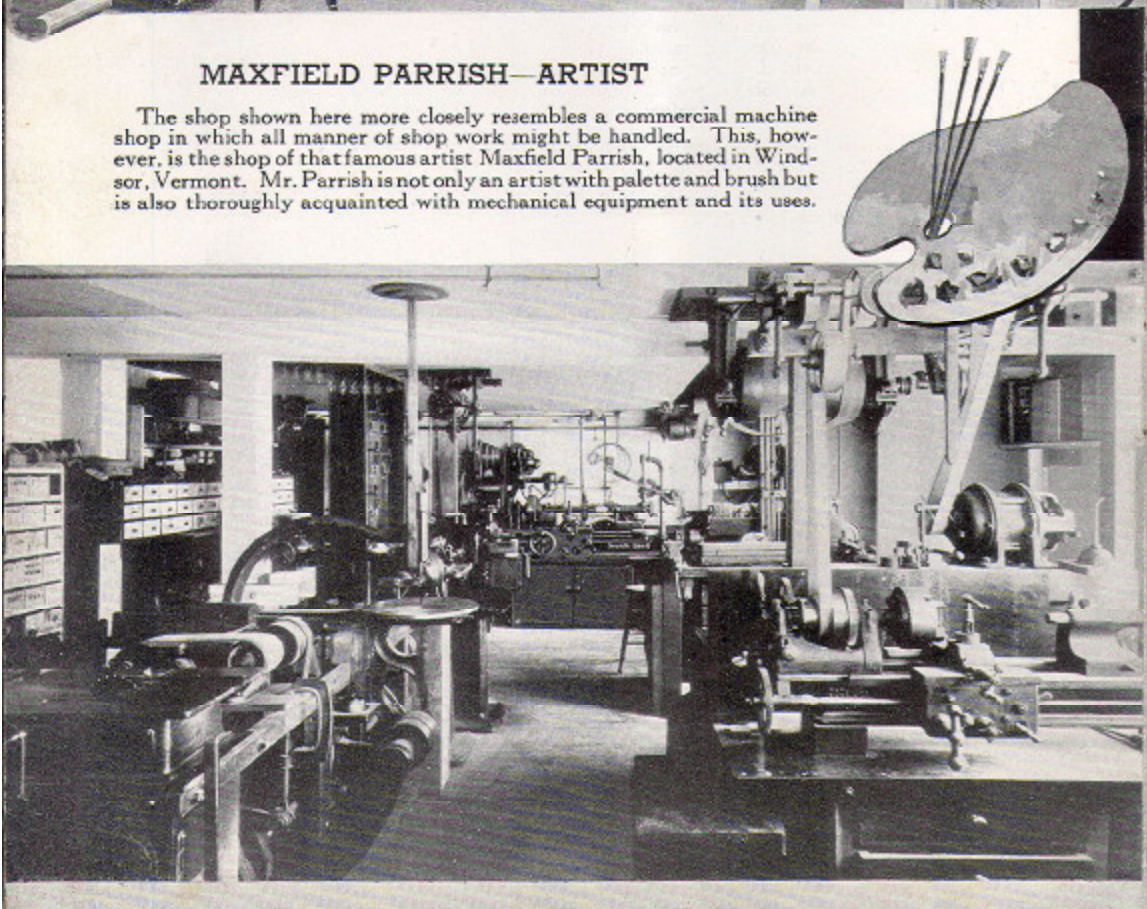
HOME SHOP OF ROD LaROCQUE

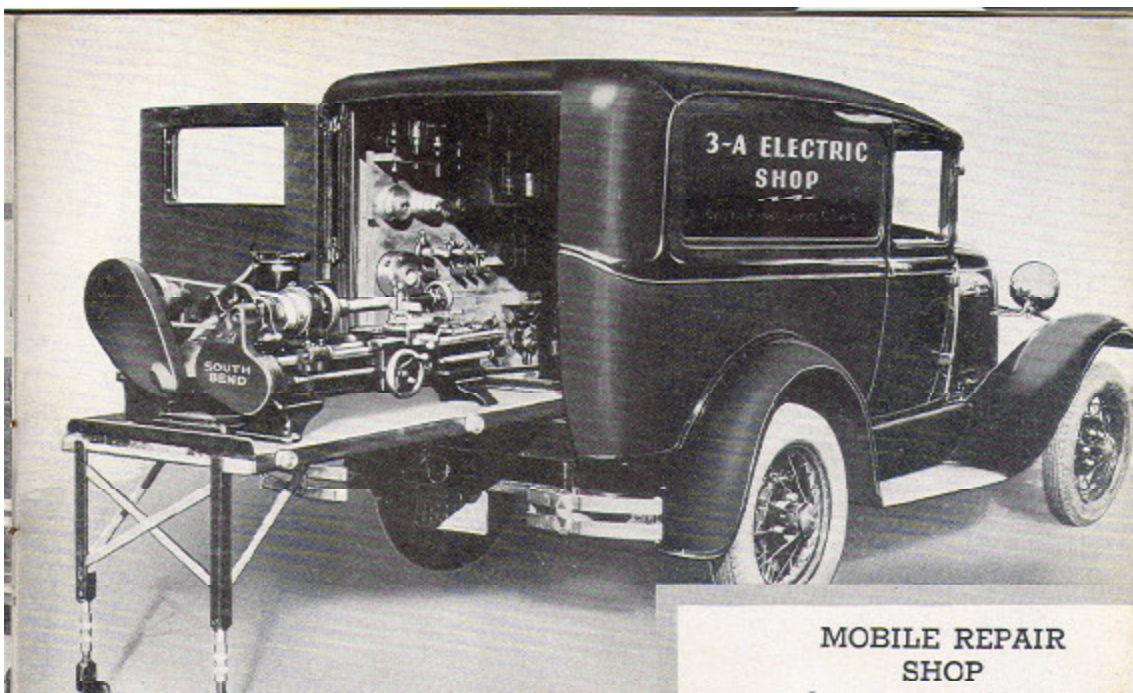
Below is shown one of the most modern home workshops in the United States, that of the movie star Rod LaRocque. Mr. LaRocque is a thoroughly experienced craftsman and is able to work out his own ideas in the most practical manner. His equipment includes a South Bend Lathe.



MAXFIELD PARRISH—ARTIST

The shop shown here more closely resembles a commercial machine shop in which all manner of shop work might be handled. This, however, is the shop of that famous artist Maxfield Parrish, located in Windsor, Vermont. Mr. Parrish is not only an artist with palette and brush but is also thoroughly acquainted with mechanical equipment and its uses.



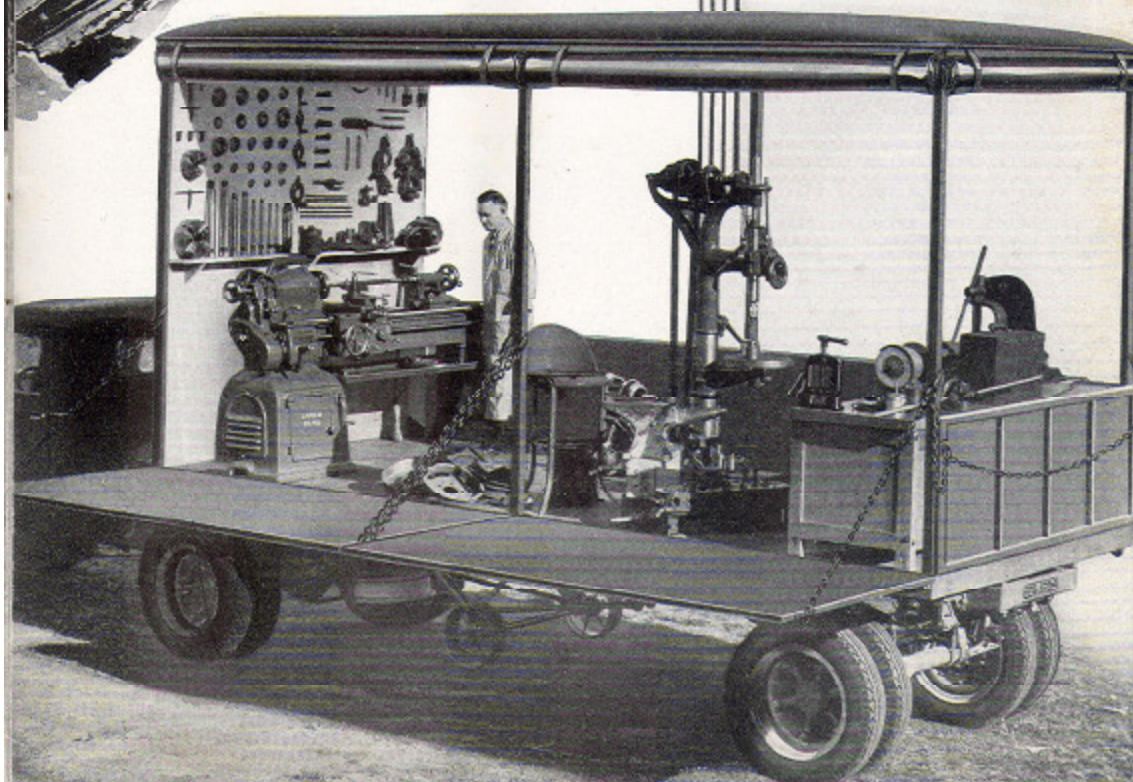


MOBILE REPAIR SHOP

In some communities, enterprising shop owners have developed a new idea by taking their shop to the job instead of the other way about. This is now especially practical because of the widespread use of equipment in the home, farm and office.

MACHINE SHOP ON WHEELS

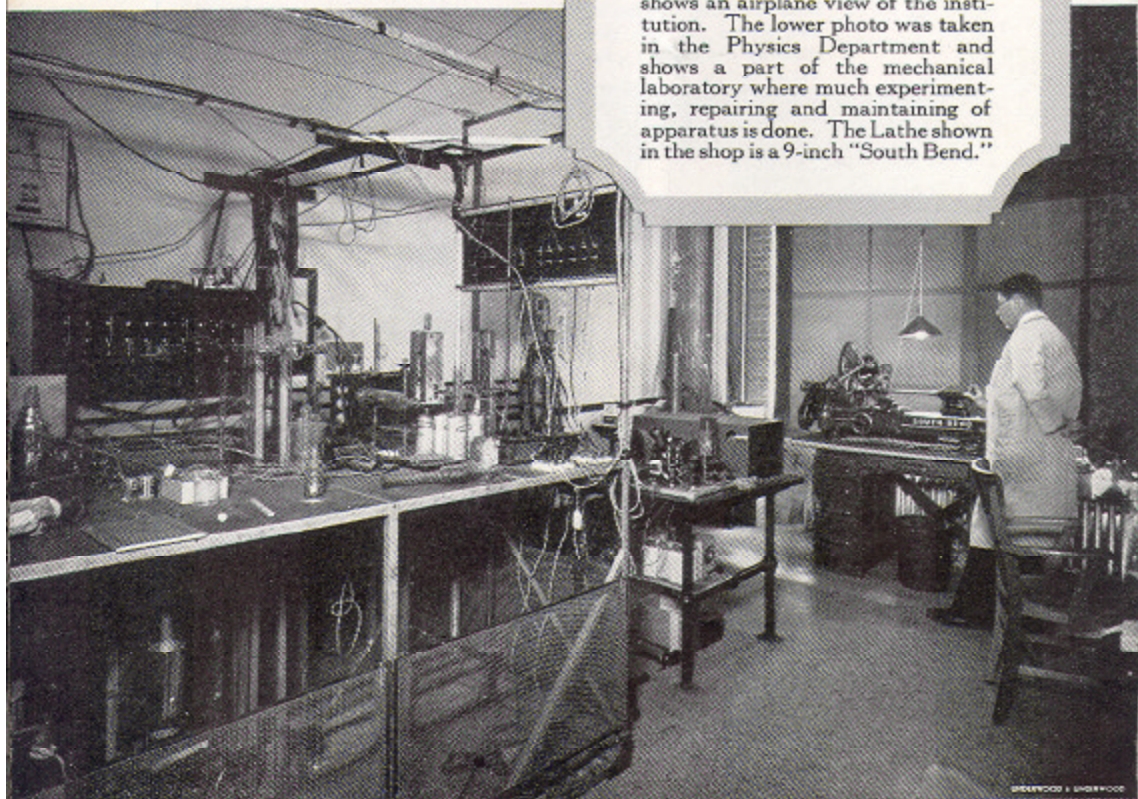
Below is shown a complete machine shop on wheels. They are used on ranches, in the oil field districts, and as mobile repair shops for the mechanized units of the military services.





MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Here we show one of the outstanding institutions of the United States whose work in technological education is known throughout the world for its excellence. The upper view shows an airplane view of the institution. The lower photo was taken in the Physics Department and shows a part of the mechanical laboratory where much experimenting, repairing and maintaining of apparatus is done. The Lathe shown in the shop is a 9-inch "South Bend."

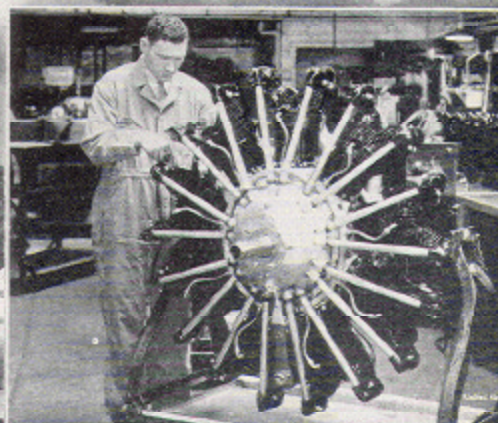
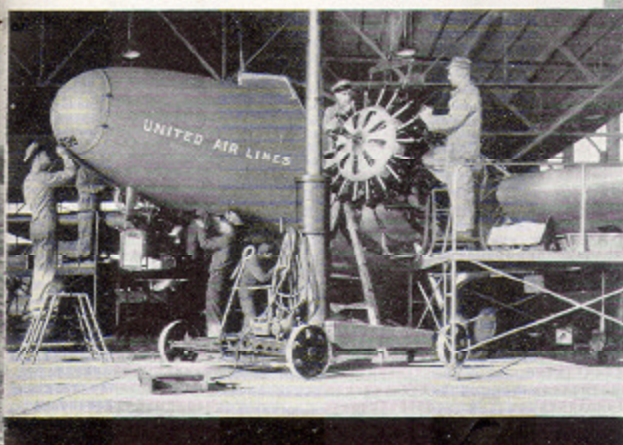


GREENWOOD & GREENWOOD

UNITED AIR LINES

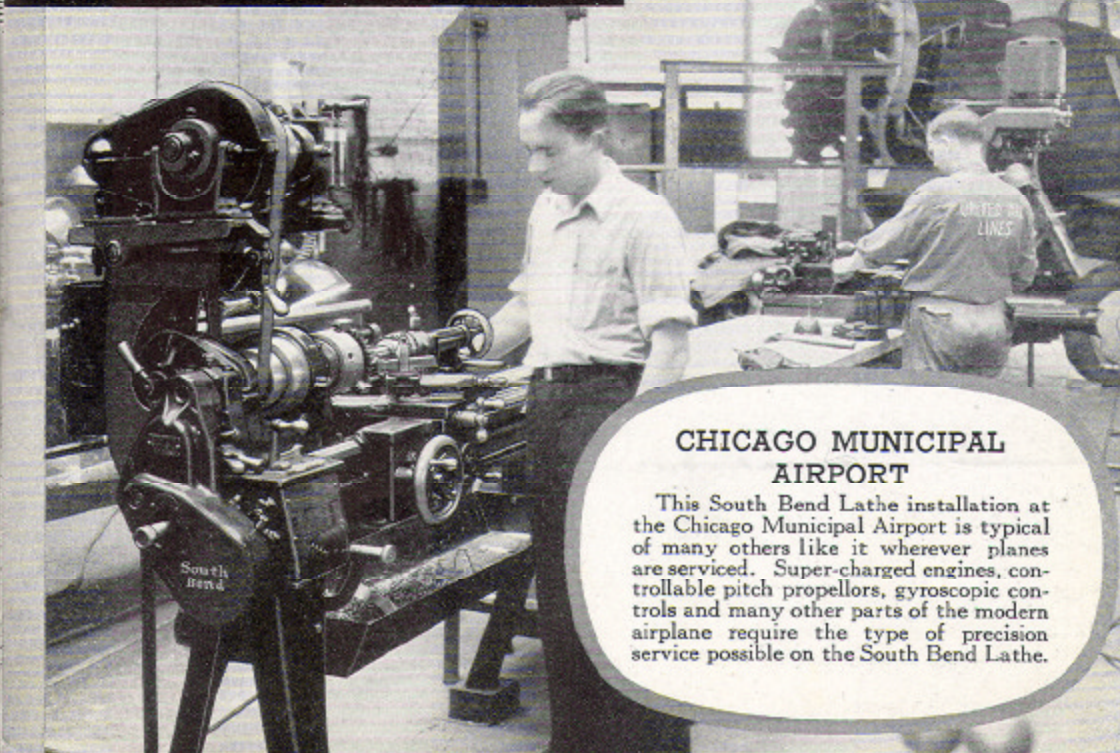
The splendid records of safe transportation set by the various commercial air lines speak well for the efficiency of their maintenance departments. Regular overhauls, rigid inspections and painstaking attention to details require not only the highest type of technicians, but also the finest of precision tools and equipment.

The illustrations on this page show the Chicago shop of the United Air Lines. This is but one of the many Air Line shops in which South Bend Lathes are contributing to the safety and reliability of air transport.



Above—An overhauled airplane motor receiving final inspection.

Left—After each 10,000 miles every plane is given a thorough overhaul.



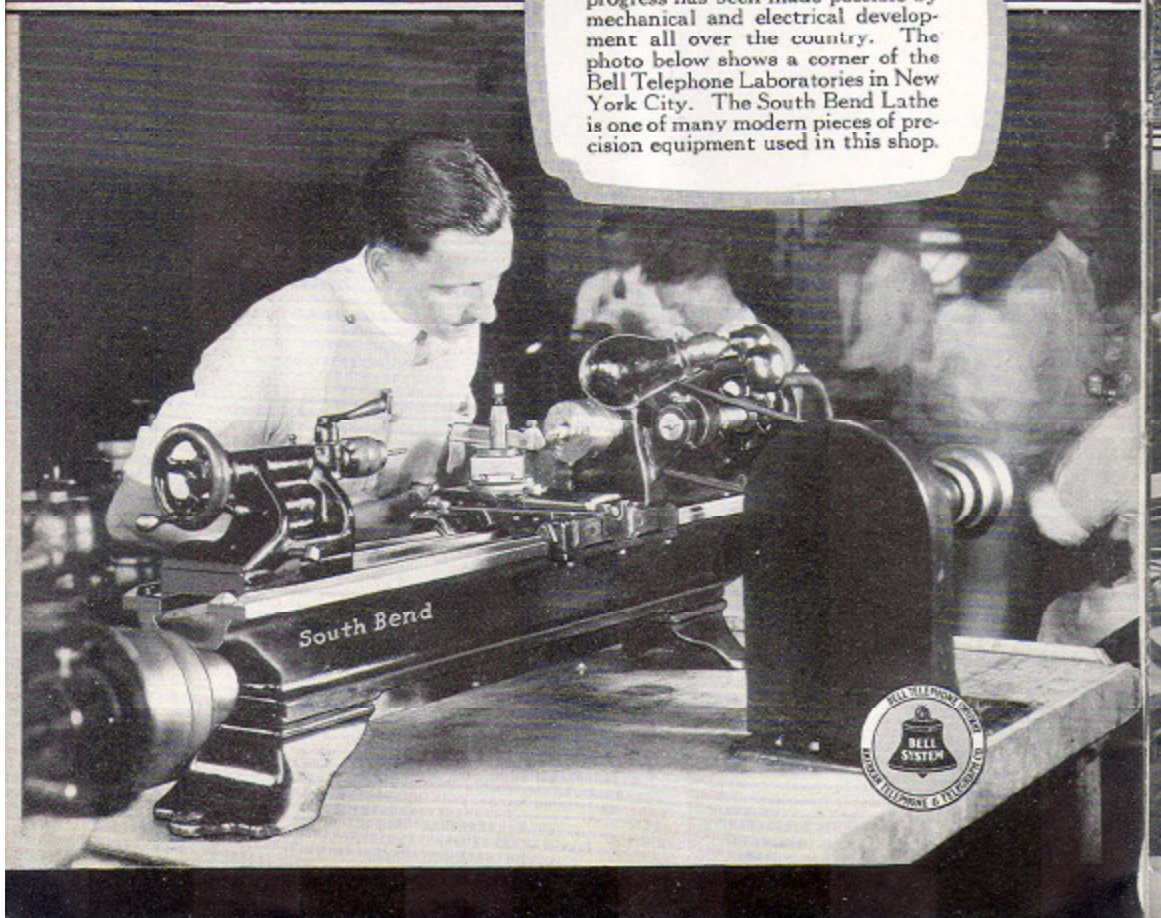
CHICAGO MUNICIPAL AIRPORT

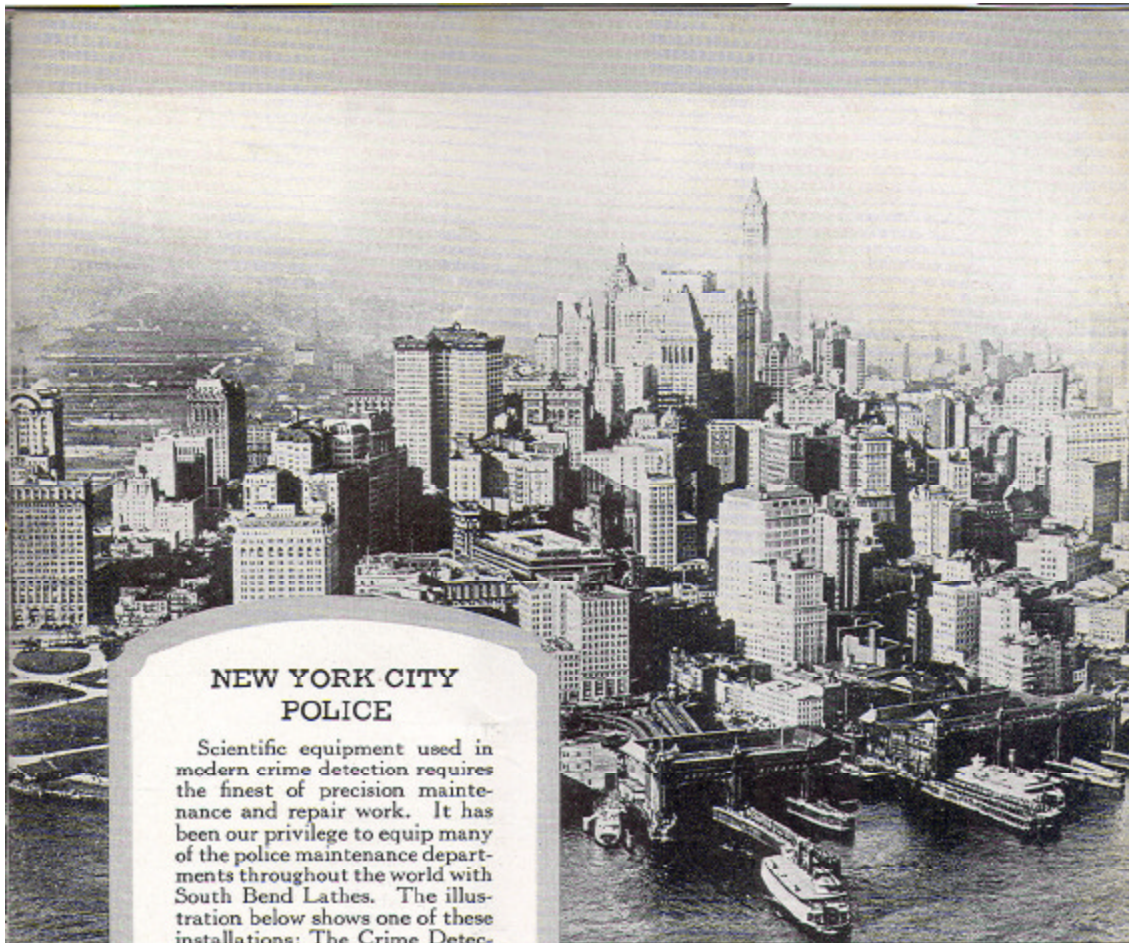
This South Bend Lathe installation at the Chicago Municipal Airport is typical of many others like it wherever planes are serviced. Super-charged engines, controllable pitch propellers, gyroscopic controls and many other parts of the modern airplane require the type of precision service possible on the South Bend Lathe.



BELL TELEPHONE SYSTEM

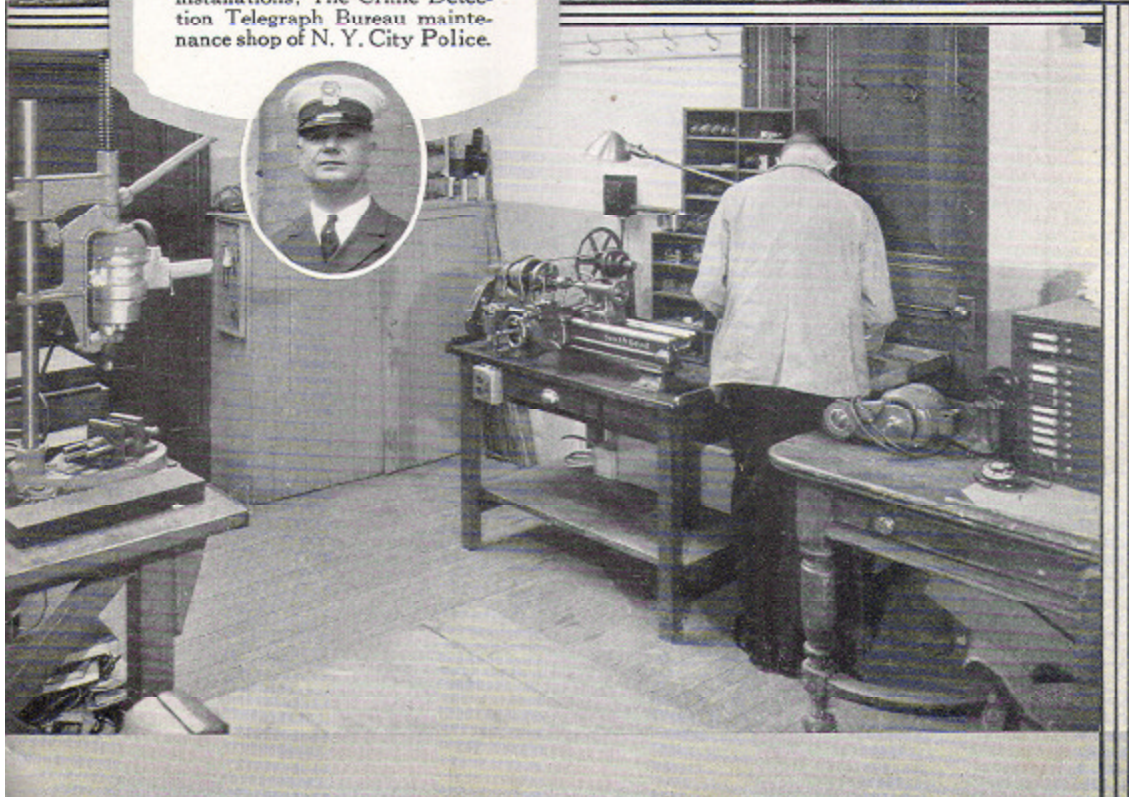
In the field of communications, progress has been made possible by mechanical and electrical development all over the country. The photo below shows a corner of the Bell Telephone Laboratories in New York City. The South Bend Lathe is one of many modern pieces of precision equipment used in this shop.





NEW YORK CITY POLICE

Scientific equipment used in modern crime detection requires the finest of precision maintenance and repair work. It has been our privilege to equip many of the police maintenance departments throughout the world with South Bend Lathes. The illustration below shows one of these installations; The Crime Detection Telegraph Bureau maintenance shop of N. Y. City Police.



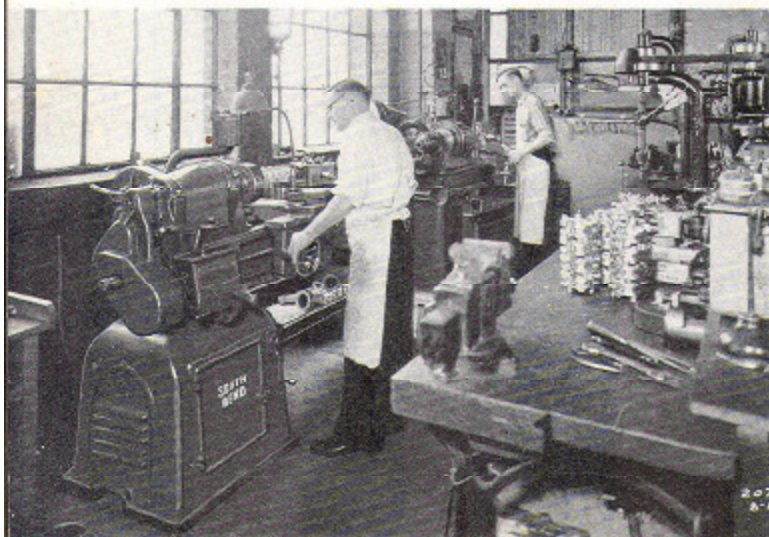


HOME WORK SHOP

The growth of the home workshop activity has been very spectacular during the past ten years. Inventors and mechanical experimenters are installing high quality equipment in their homes. Schools and community recreational centers are encouraging and fostering the home shop idea everywhere. Naturally, the basic equipment for these shops is a screw cutting lathe. The shop shown here belongs to the New York Society of Model Engineers, New York City, N. Y., and is equipped with a 9-inch South Bend Lathe.

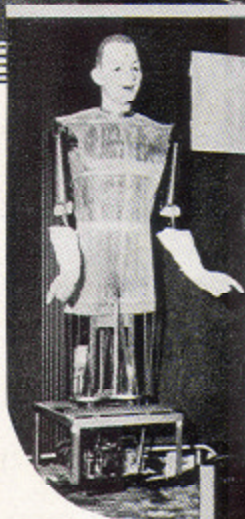
AUTOMOTIVE SERVICE SHOPS

The mechanical parts of the modern automobile, truck and bus are precision built in the most highly efficient industrial plants the world has ever known and in order to keep these vehicles operating they must be repaired and maintained with precision tools and equipment. An excellent example of a well equipped shop doing quality work is the United Motors Service, Denver, Colorado, shown at right.



MANUFACTURING AND INDUSTRIAL

Thousands of manufacturing plants, machine shops and industrial establishments throughout the United States and 96 countries and colonies abroad are equipped with South Bend Lathes for doing every type of machine job in all kinds of materials. The representative type of modern shop shown here is the Imperial Brass Company, Chicago, Ill.

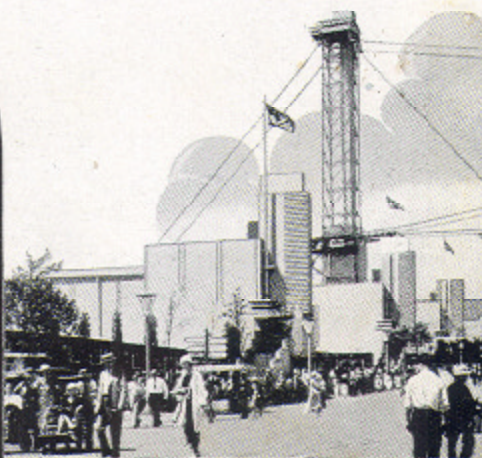


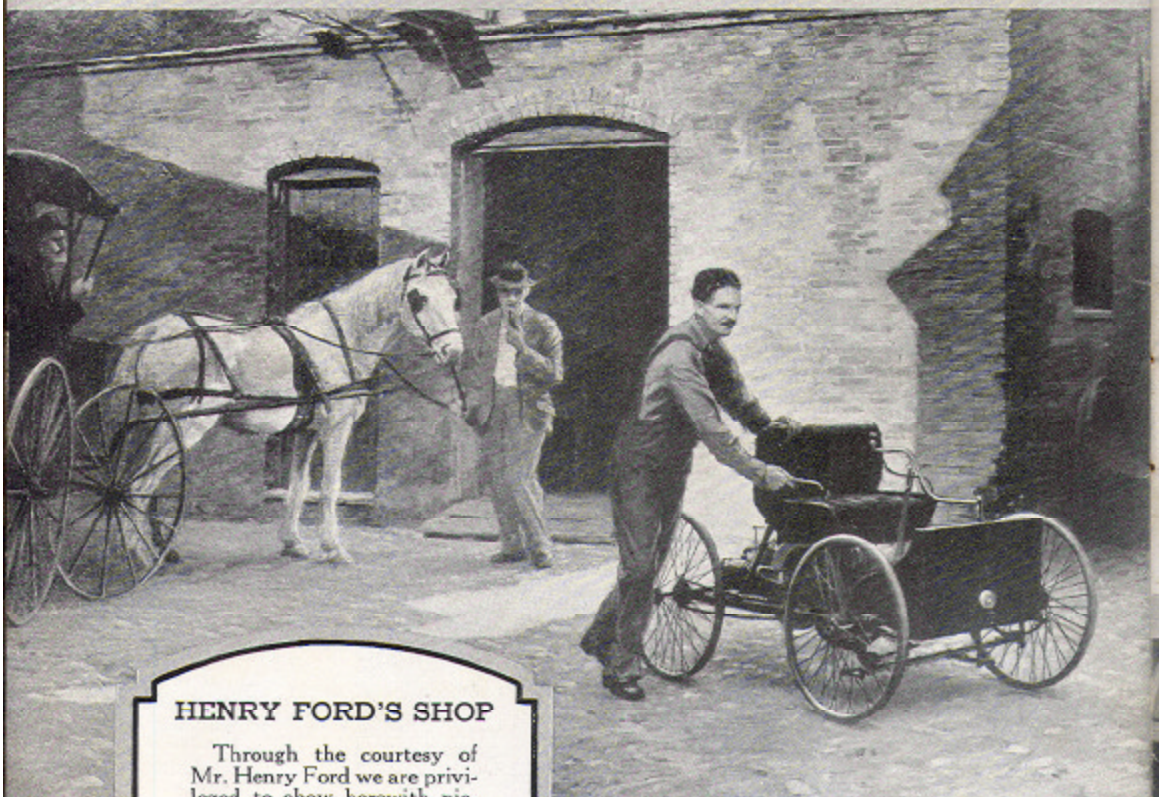
THE MECHANICAL MAN

Mechanical robots are used to a great extent in modern industry and in government and commercial fields. Mechanical robots pilot planes, steer ships, control speed of trains, protect operators of big presses and perform a multitude of other functions accurately, uniformly and with unfailing dependability.

The illustrations below show one of the interesting developments of a humanized "Mechanical Man" invented and produced by Andrews & Perillo, of New York City, makers of animated displays of which more than 40 were built for various exhibits at the World's Fair in Chicago in 1934. They use South Bend Lathes in their shop for developing all mechanical and electrical displays.

Above and at right are shown two views of the mechanical man built by Andrews & Perillo and seen by millions at the World's Fair in Chicago.





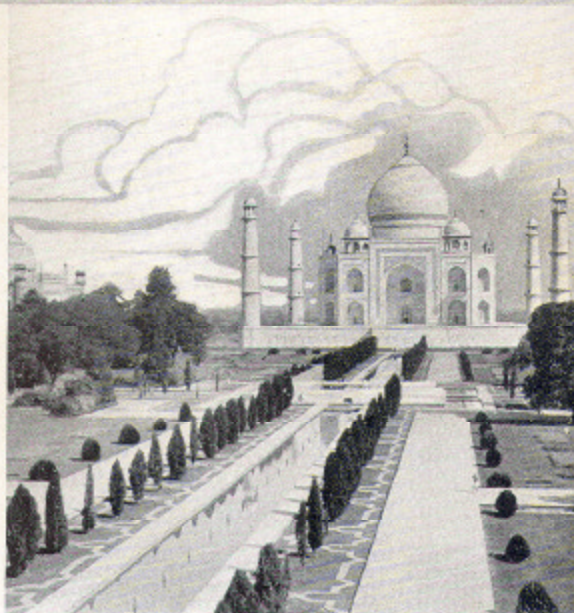
HENRY FORD'S SHOP

Through the courtesy of Mr. Henry Ford we are privileged to show herewith pictures taken of replicas of his original shop. While the lathe shown in the shop below is not a "South Bend" it played such an important part in the development of the first FORD that it was our desire to include these pictures in this book. Mr. Ford's private workshop is equipped with a 1936 Model 9-inch South Bend Lathe.

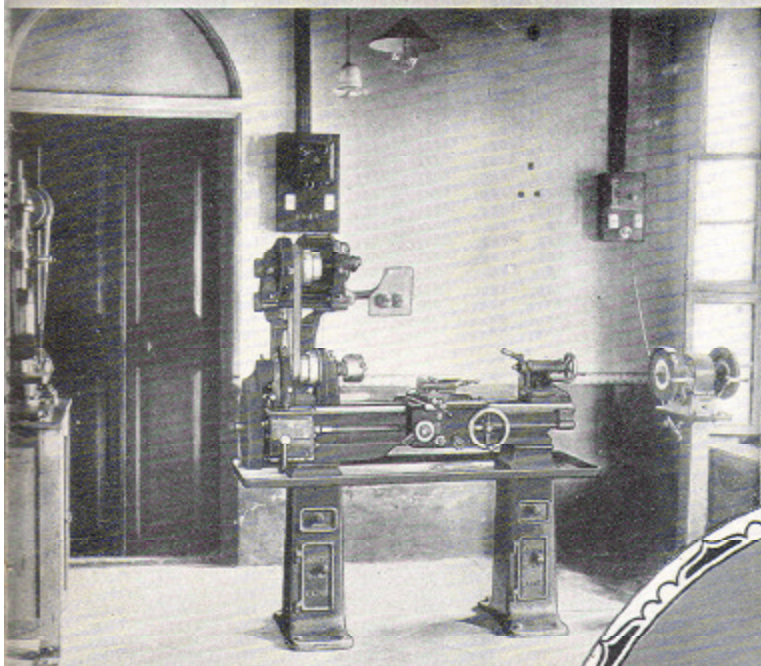


India

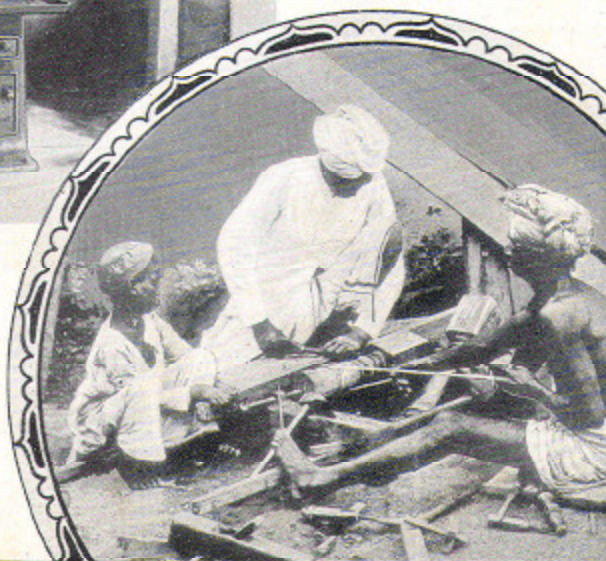
Some of the most interesting installations are in countries abroad. In many instances modern and up-to-date devices and equipment will be found alongside primitive make-shift arrangements for doing similar work. In India, China and in Africa these contrasts are as evident in mechanical development as in architecture. Modern Science and Industry are taking hold in every country and demand the use of high class machines and instruments of precision and accuracy.



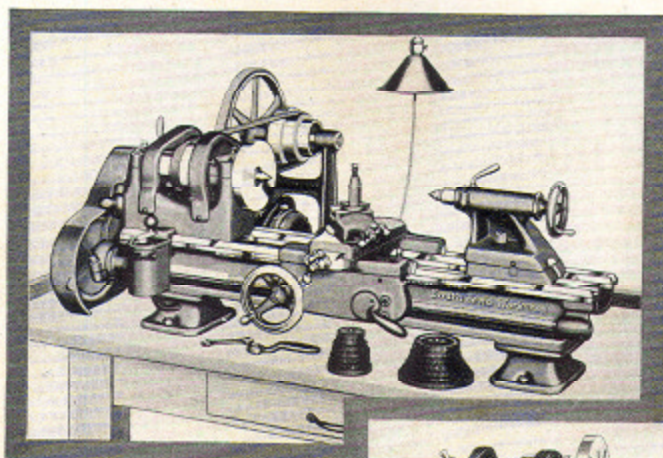
Above — The Taj Mahal, one of the rarest and most beautiful examples of architecture in the world.



Above—Mechanical Laboratory of Mr. R. Madhava Rau, Mylapore, Madras, India. Mr. Rau is a scientist, and in this shop, which is equipped with a South Bend Lathe, has developed some of the finest light ray refraction instruments obtainable anywhere.



At Right—A primitive lathe in the Punjab of India. Some very high class work has been done on simple equipment of this kind.

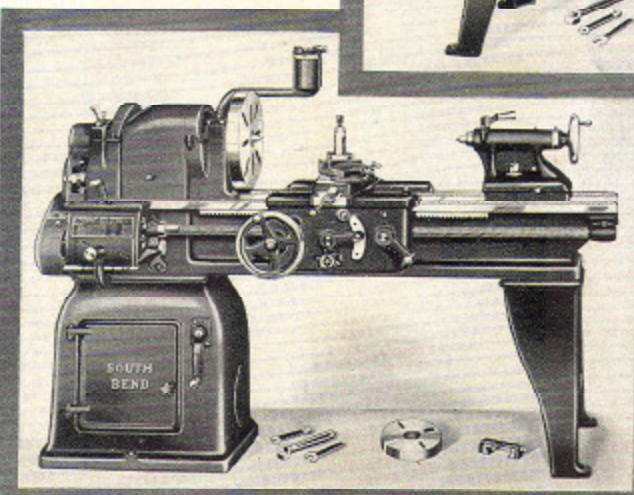
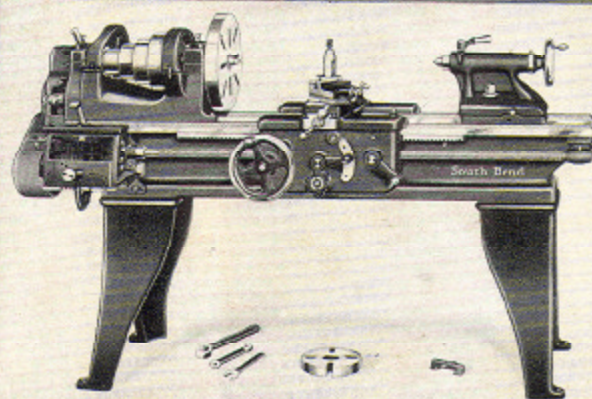


At Left—No. 415-Y 9" x 3'
1936 Model South Bend
"Workshop" Horizontal "V"
Belt Motor Driven, Back-
Geared Screw Cutting Pre-
cision Bench Lathe.

One of the finest small lathes
we have ever built.

At Right—No. 92-C 16" x
6' 1936 Model South Bend
Overhead Countershaft
Driven, Quick Change Gear,
Back-Geared Screw Cutting
Precision Lathe.

A popular type high qual-
ity precision lathe.



At Left—No. 192-C 16" x
6' 1936 Model South Bend
Underneath Belt Motor
Driven, Quick Change Gear,
Back-Geared Screw Cutting
Precision Lathe.

A practical, efficient and
popular motor driven lathe.

Works at South Bend, Indiana. This organization was founded in 1906 and has grown and developed to an enterprise occupying the buildings shown here, which have a floor space of 180,000 square feet and with a ground area of 41½ acres devoted exclusively to the manufacture of South Bend Back-Geared Screw Cutting Precision Lathes.

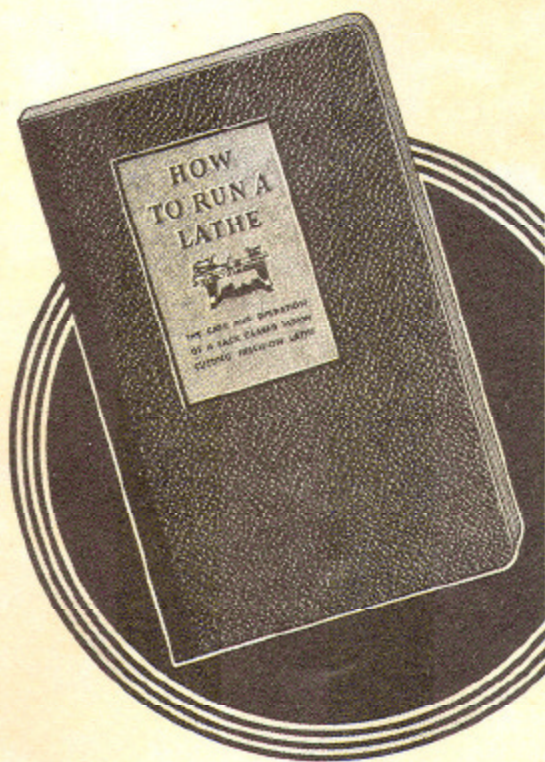
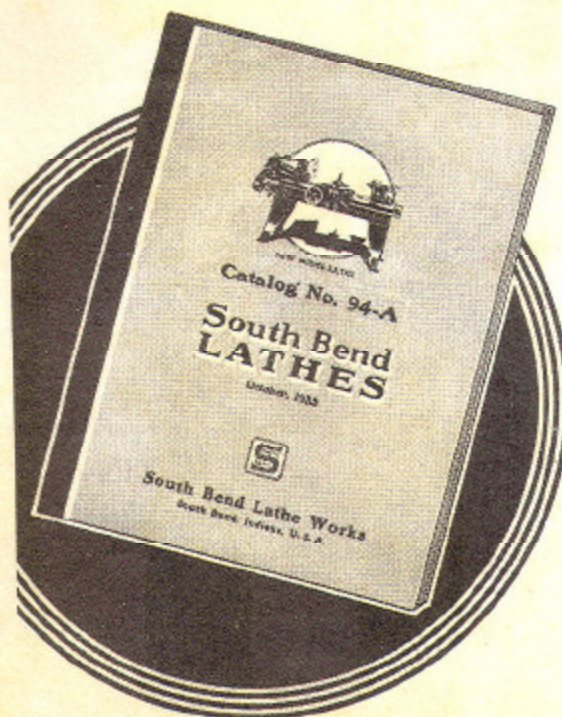
SOUTH BEND LATHE WORKS
SOUTH BEND, INDIANA, U. S. A.



GENERAL CATALOG

The new 72-page General Catalog illustrates, describes and prices the entire South Bend Line of Back-Geared, Screw Cutting Precision Lathes and also the complete South Bend Line of Chucks, Tools and Accessories.

A copy will be sent free, postpaid, without obligation to anyone interested in lathes or lathe work.



HOW TO RUN A LATHE

This interesting and instructive manual completely covers the care and operation of a back-geared, screw cutting lathe. It is the most popular text book on lathe work in the world and in addition is a valuable reference book. Contains 160 pages, size 5 1/4" x 8".

A copy of "How to Run a Lathe" will be mailed anywhere in the world postpaid, 25c for the paper bound copy and 75c for the leatherette bound copy. Coin or stamps of any country accepted.

A Few Other Users of South Bend Lathes

Machinery Industry

Champion Shoe Machinery Co.
Singer Mfg. Co., Inc.
American Laundry Mach. Co.
Burroughs Adding Mach. Co.
Allis-Chalmers Mfg. Co.

Electrical and Radio

General Electric Co.
Westinghouse Elec. & Mfg. Co.
Atwater Kent Mfg. Co.
Crosley Radio Corp.
Philco Radio & Television
Radio Corp. of America
WEAF—New York City
WBBM—Chicago, Illinois

Power Companies

Brooklyn Edison Co., Inc.
Commonwealth-Edison Co.
Detroit Edison Co.
Minnesota Power & Light Co.

Oil Industry

Ethyl Gasoline Corp.
Gulf Refining Co.
Shell Oil Co.
Sinclair Refining Co.
Standard Oil Co.

Mining Industry

Anaconda Copper Mining Co.
Alaska Juneau Gold Mining
Morris Run Coal Mining Co.

Railroads

New York Central R. R.
Pennsylvania R. R.
Union Pacific R. R.
Northern Pacific R. R.
Southern Pacific R. R.

Aircraft Industry

Sikorsky Aircraft Corp.
Scintilla Magneto Co.
Pan-American Airways
Pratt & Whitney Aircraft Co.

Steel Industry

Bethlehem Steel Co.
Carnegie Steel Co.
Inland Steel Co.
U. S. Steel Corp.
Youngstown Sheet & Tube Co.

Automotive

Cadillac Motor Car Co.
Chevrolet Motor Co.
Chrysler Corp.
Ford Motor Co.
Hudson Motor Co.
Nash Motors Co.
Packard Motor Car Co.
Studebaker Corp. of America
White Motor Co.
A.C. Spark Plug Co.
Bendix Aviation Corp.
Firestone Tire & Rubber Co.
Fisher Body Corp.
Goodyear Tire & Rubber Co.
Tropicair, Inc.

Textile Industry

Amoskeag Mfg. Co.
Chenango Textile Corp.
Patchogue—Plymouth Mills Corp.
Southern Worsted Corp.

Printing Industry

Chicago Tribune
New York Times
Philadelphia Inquirer

Instrument Manufacturers

Eastman Kodak Co.
General Electric X-Ray Corp.
Leeds & Northrup Co.
Eugene Dietzgen Co.
Minneapolis Honeywell Co.

Steamship Companies

American Hawaiian S.S. Co.
Munson Steamship Lines
Panama Mail Steamship Co.

Shipbuilders

American Shipbuilding Co.
Bethlehem Shipbuilding Corp.
Newport News Shipbuilding

Chemical Industry

Dow Chemical Co.
E. I. duPont de Nemours
Lambert Pharmacal Co.
E. R. Squibbs & Sons, Inc.

Appliance Manufacturers

Frigidaire Corp.
The Hoover Co.
Kelvinator Corp.
Serval, Inc.