

MONTHLY REVIEW

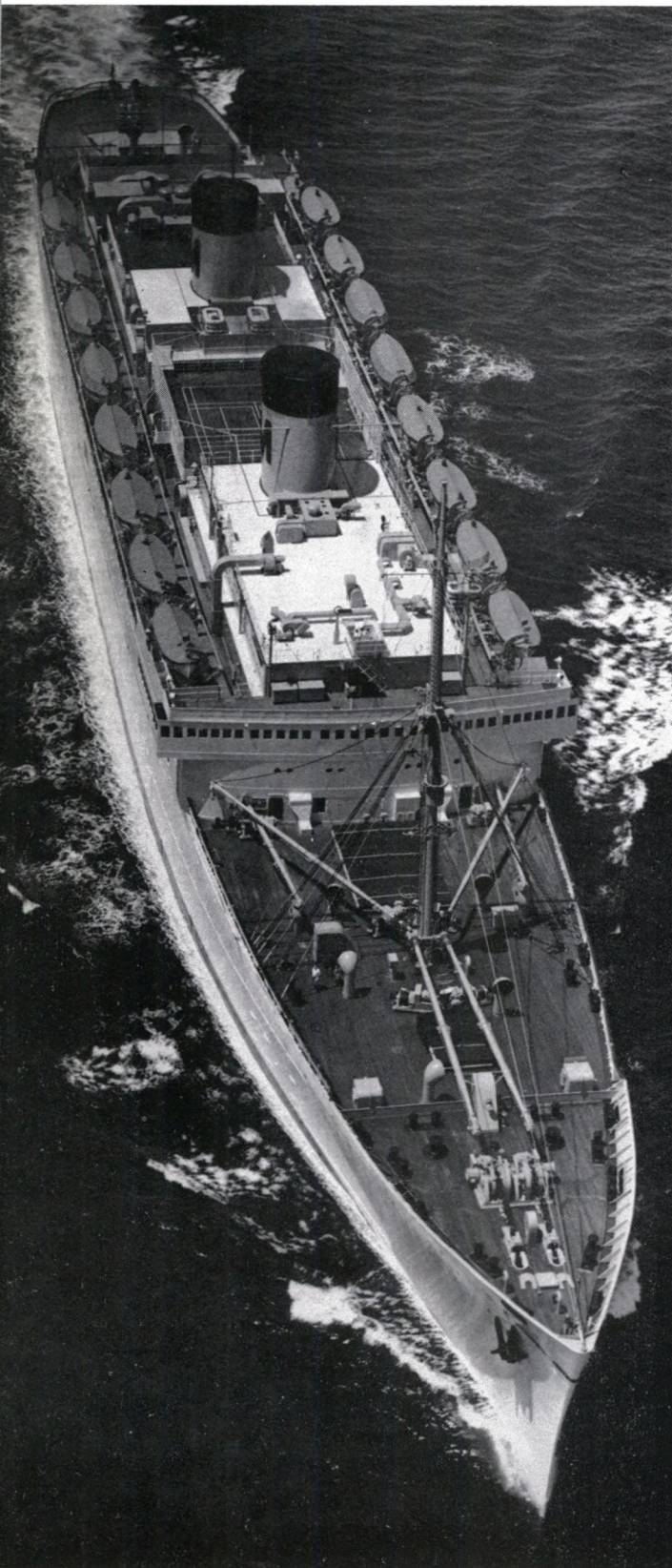


Shipbuilding lends buoyancy to District economy.

FEDERAL RESERVE BANK OF RICHMOND

MARCH 1958

The Ship



The luxury ship SS MATSONIA was converted at Newport News from the USS MONTEREY, World War II transport.

Last month a crane lowered a 20-ton section of heavy steel plate into Dry Dock No. 11 at the Newport News Shipbuilding and Dry Dock Company's yard. As it settled into place, Rear Admiral A. G. Mumma, Chief of the U. S. Navy Bureau of Ships, stepped forward and with a brisk tap of a mallet, placed a Navy seal on a small plaque that read "USS *Enterprise*, first nuclear powered attack aircraft carrier." The keel had been laid for an 1100-foot carrier, the first large surface warship of the new era at sea.

History and the future joined hands over Hampton Roads that day as they have done so often in the past. Across from Newport News lies the Norfolk Naval Shipyard, older than the Navy itself and builder of 18th century ships like the frigate *Chesapeake* and converter of the CSS *Virginia*, ex-*Merrimac*, which battled the USS *Monitor* in these same waters. The shipyard built two of the first ships of the new all-steam Navy, the cruiser USS *Raleigh* and the battleship USS *Texas*, and has continued to build and service fighting ships through a total of nine wars.

The north shore of Hampton Roads has likewise produced its share of leaps into the future. Of more recent origin than the Navy yard, the Newport News yard has established itself as the largest private shipyard in the country. It was here that the SS *United States*, queen of the North Atlantic passenger runs, and the USS *Forrestal*, prototype of the super-carrier class, were built; the latter took shape in the same dry dock that must now be enlarged for the *Enterprise*.

Farther to the north, other "firsts" are appearing. The Maryland Shipbuilding and Drydock Company, at Baltimore, is working toward a spring delivery date for the USNS *Point Barrow*, the first of a new class of ship for the U. S. Navy—as well as the first major vessel to be built by this company. Designated a cargo ship dock (T-AKD-1 in Navyese), its primary mission will be to service military bases in the arctic. Bethlehem Steel Shipbuilding Division's Sparrows Point yard last month launched its biggest product to date, the 46,000-ton SS *Trinidad*, one of a series of super-tankers to be built there.

ECONOMIC BRIGHT SPOT The *Enterprise*, the *Point Barrow*, and 37 other major ships under

uilders

contract for construction by Fifth District yards provide a bright spot in the current business picture of the District. The Suez crisis and the large volume of ocean shipping in recent years increased ship repair activity and pointed up the need for modernizing and enlarging merchant shipping fleets. The pressure of developing war technology has for years forced a continuing updating of the fleets of the United States Navy. The shipyards of the Fifth District have benefited from these two developments. Even though current slackness in ocean shipping has caused some cancellations of merchant ship contracts and declines in repairs, the larger yards of the District are working on contracts for the construction or conversion of 52 merchant ships, aggregating more than \$500 million, as well as several naval vessels totaling perhaps two-thirds this amount.

Employment at the two Navy yards at Norfolk and Charleston, the Coast Guard Yard at Baltimore, and the five largest private firms currently numbers 45,000, with annual payrolls of \$240 million. This is far below the peaks of World War II, when these same yards employed 182,000, and large temporary construction yards accounted for another 68,000. At the same time, it represents a substantial increase from the low activity of a number of the postwar years.

Merchant shipbuilding and repair are important in this picture, but the Navy bulks large in District shipyard totals. The Norfolk and Charleston Naval Shipyards employ 18,600 civilian workers with annual payrolls of \$98 million, and the Navy paid an additional \$13 million last year to private shipyards in the District for the repair of naval vessels.

The United States Coast Guard's only shipyard is at Baltimore, where 1,400 workers are employed building and repairing vessels and other equipment used by that service. Its billings of \$11,105,000 last year were concentrated in repairs to vessels, but also included substantial manufacturing of buoys and other products for the Navy and the Army.

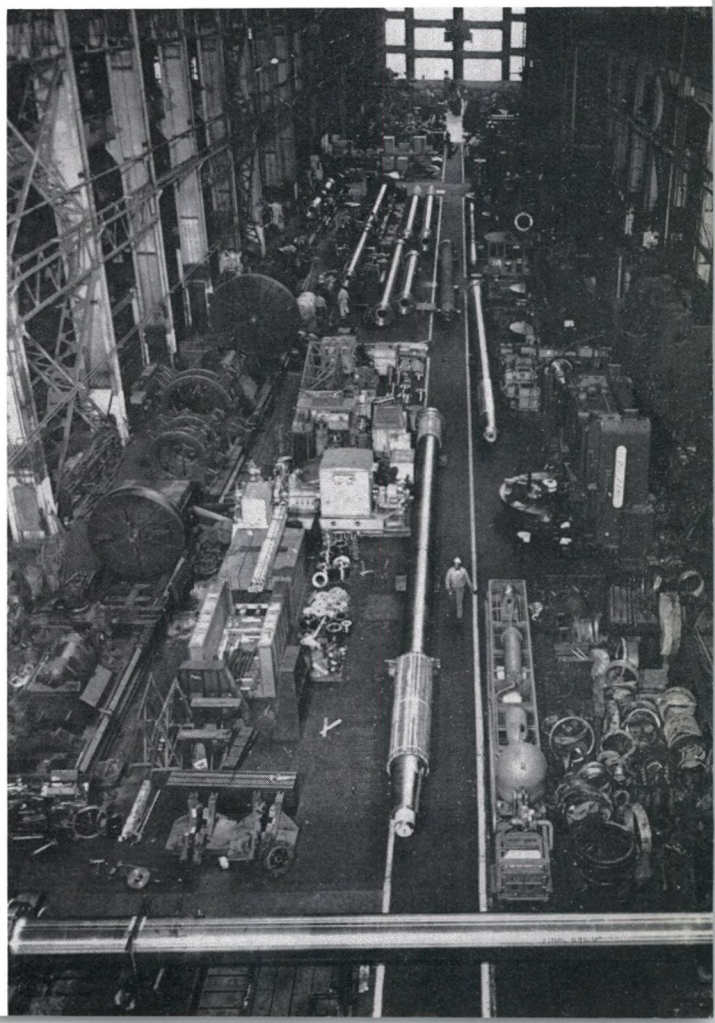
Employment at the shipyards is particularly important for the cities directly involved. The Norfolk Naval Shipyard, the Newport News yard, and the Norfolk Shipbuilding and Drydock Company's three yards have total civilian employment

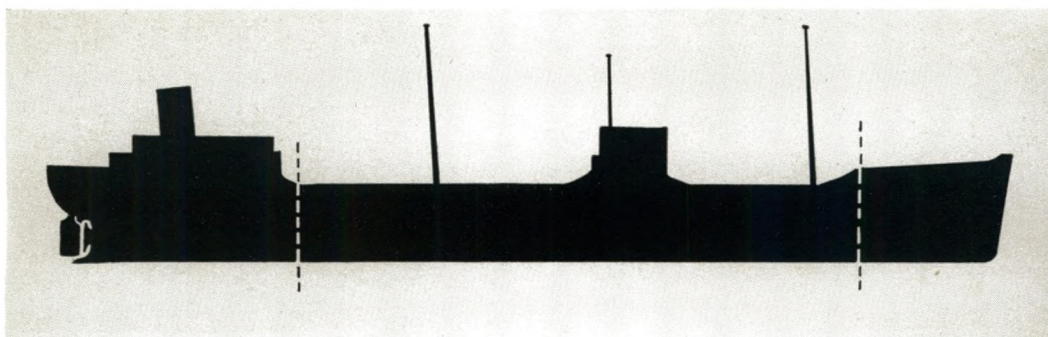
of 25,400. Bethlehem's two yards, Maryland Shipbuilding, and the Coast Guard Yard hire a total of 11,800 civilians at Baltimore. At Charleston the Navy yard and Charleston Shipyards, Inc. list 7,300 workers on their rolls.

COMPLICATED BUSINESS Ship construction and repair are involved operations calling for the close coordination of engineers, draftsmen, shop mechanics, and the many specialized skilled workers who fit together the pieces that go to make up a ship. A large shipyard has as many as 60 individual trades represented among its workers, plus specialized office workers of all kinds. Planning is detailed and precise to avoid delays that can cost thousands of dollars a day.

New construction of major ships typically starts from architects' drawings that provide the broad outlines of a ship. Structural details, the power plant, piping layouts, electrical circuits, ventilation systems, and the like are all developed within the shipyard's own design departments and there transferred to blueprints. Bills of materials

Precision work on large castings and forgings requires machine shops such as this one at the Norfolk Naval Shipyard.





Jumbo recipe: Take a T-2 tanker and remove the wornout midsection. Insert a new, wider and longer middle, like this one being launched at Maryland Shipbuilding. Result is a one-fourth increase in cargo space with no loss of speed.

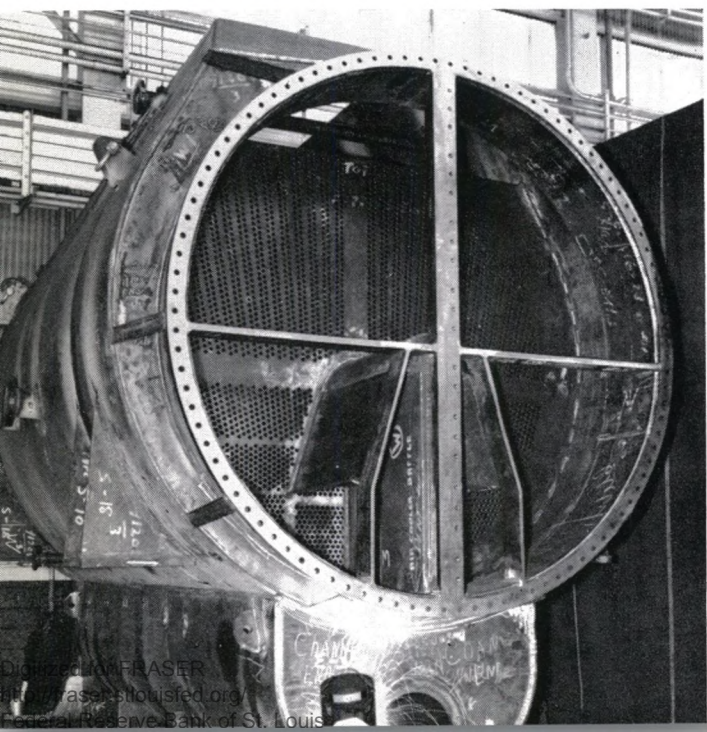


are drawn up from these plans, purchase orders are issued, shops are started on fabrication of pieces, and many thousands of dollars are spent before the keel is laid.

Repair and conversion jobs involve substantially these same steps, frequently with the added pressure of an idle ship waiting expensively at a pier. Damaged or worn-out hull sections require the design and assembly of replacements, while even routine overhauls of machinery lead to needs for new parts which must be manufactured in shipyard shops.

CONTRACTS, FORMAL AND OTHERWISE The long lead required for design, planning, and ordering materials makes a cancellation clause a stand-

Industrial products include steam condensers like this one being finished at Maryland Shipbuilding and Drydock Company.

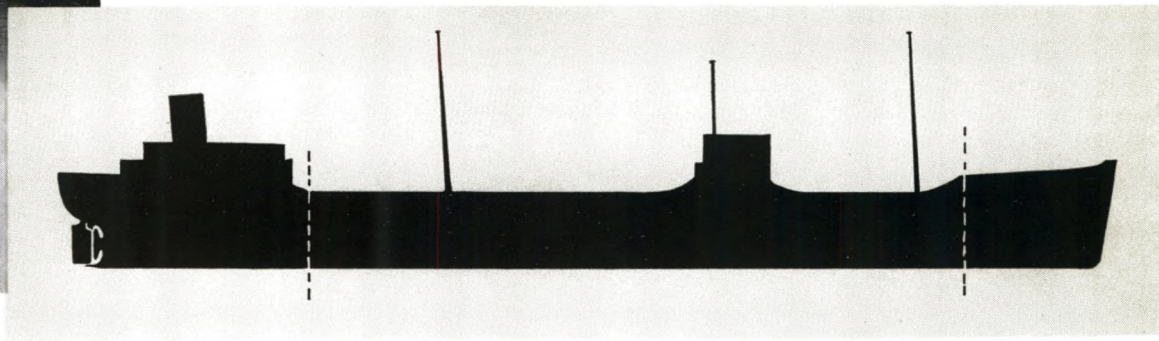
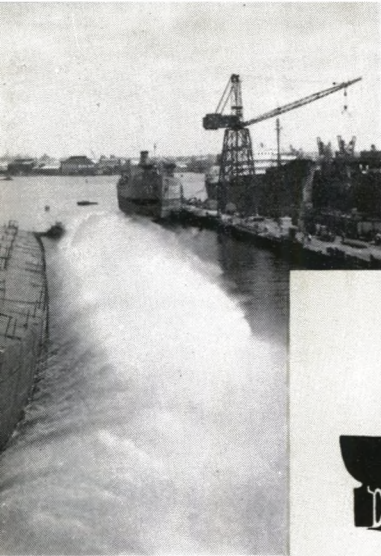


ard item in new ship contracts. These same factors make necessary a forfeit to the builder, either a fixed sum that has been paid at the time of signing the contract or an amount that can be calculated on the basis of design and fabrication work and cost of materials purchased up to the time of cancellation. The long period of construction also leads to a schedule of progress payments as work progresses, based either on the percentage of work completed or on the builder's costs to the date of payment.

Time pressures dominate arrangements for repairs. Naval ships schedule shipyard visits well in advance so that detailed planning is under way well beforehand. Merchant ships, however, frequently give only a few hours' notice of arrival, the decision turning on the availability of cargoes. An idle ship is a costly ship, and every effort is made to capsule contract negotiation, design, and planning so that work on the ship may start promptly.

The result is that much work is done without formal contract, based on no more than confidence born of experience that both owner and shipyard are reasonable and responsible. In setting its price upon completion of the work, the shipyard is aware that future business rests upon its being in fact reasonable, while the owner must meet his obligations if his ships are to be free of encumbrance. Many ships sail from repair yards leaving an open account charge to the owner of several hundred thousand dollars.

More formal agreements are sometimes made, of course. Owners having no experience with a yard and owners able to lay up a ship for awhile may require detailed tenders that describe work and give firm prices for it. Shipyards likewise



may favor securing specific authorization for work from some owners, together with payment prior to the ship's departing.

JUMBO-IZING Naval ships are continually undergoing modernization operations intended to improve their contribution to our country's naval power. A shipyard visit is usually the occasion for alterations of ship or armament. In some cases these changes are so extensive as to produce either a different type of ship or a vast improvement in an old type. The Charleston Naval Shipyard, for example, is now converting a freighter to serve in a completely new role as an offshore floating radar station.

Merchant ships similarly undergo conversions either for new uses or for improved performance at old tasks. Currently a group of wartime T-2 tankers, considered big and modern in their construction days, are being extensively modified to increase their tank capacity. The 306-foot cargo section of the hull, which has been corroded from petroleum acids and frequent cleaning, is replaced by a section 48 feet longer and 7 feet wider. The bow section and the stern, including the engine room, are kept intact. The "jumbo" hull increases the cargo space about one-fourth, and despite the larger bulk, the same engine produces about the same speed due to an improvement in hull lines.

The first of these conversions was completed in 1957 by the Bethlehem Baltimore Yard. Newport News and Maryland Shipbuilding have also delivered such jobs, and the latter currently has eight more under contract.

WORK SHIP TO FLOATING PALACE A \$17 million conversion was completed last year by the

Newport News yard to restore the SS *Matsonia* to her prewar role as a luxury liner. Following war service as the USS *Monterey*, she had been stripped of machinery and furnishings and placed out of service. The design, conversion and re-furnishings—said to be the largest project of its kind in U. S. merchant marine history—were accomplished in less than 12 months from contract to delivery.

INDUSTRIAL PRODUCTS The ups and downs of shipbuilding and repair work have led private shipyards to develop industrial products as a side line. Shops that make ship parts can also make condensers for shore power plants, pipelines and penstocks, wind tunnels, railroad cars, hydraulic turbines, vehicular tunnel sections, and a host of other products that call for heavy forgings and thick steel plate. Concern with diversification has led to increased emphasis on this type of work. Currently one company reports that one-seventh of its 1957 billings were for products of this type, while another reports one-twentieth.

In 1953 Newport News Shipbuilding set up an atomic energy division in its design department and started actively competing for contracts for reactor components. It now has a 500-employee subsidiary at the National Reactor Testing Station in Idaho, where a land based prototype of a ship's nuclear power plant is being built and will be operated. A neat straddle is thus achieved: some reactor parts fit into the family of industrial products, while the experience gained in nuclear power has helped in design work on the atomic carrier USS *Enterprise* and the USS *Shark*, a nuclear submarine now under construction.



Tobacco seed are so small they must be planted in beds where the soil has been carefully prepared and treated to destroy weed seeds, diseases, and insects. The beds are covered with cheesecloth to protect the tiny seedlings from cold and wind.



Tobacco plants are usually transplanted from 5 to 7 leaves. Working with a machine sets every other plant. The

BEHIND THE TOBACCO AUCTIONEER'S CHANT

Production of bright leaf tobacco—the leading kind used in cigarettes—is an art requiring the cl

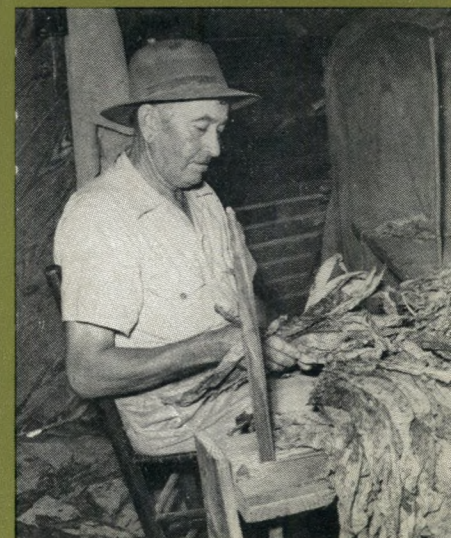
It takes eyes alive to variations in color, fingers sensitive to differences in texture.

It takes long hours of painstaking work, the skill and know-how which come from years of exper

It takes all these—plus the scientific knowledge gained through research.

The farmer delivers his tobacco to a warehouse to be sold at auction. There he arranges each grade on separate baskets furnished by the warehouse. Each basket is weighed, given a serial number, and ticketed with identifying information. The baskets are then arranged in long rows on the warehouse floor to await sale.

Cured tobacco is dry and brittle and must be held in the air before it can be handled. When fully sorted into the many different grades, color, size, and texture are tied into





they are 5 or 6 inches high and have
 ming, each man on the transplanting
 set per acre averages around 6,700.



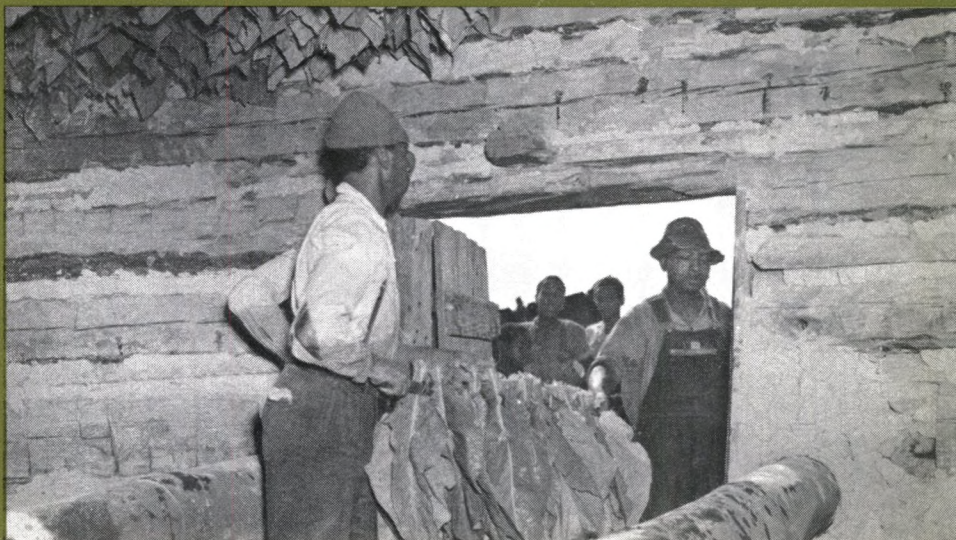
Growing tobacco requires constant care. Fields must be weeded, fertilizer applied, and several cultivations made. Flowering heads are often "topped" or pulled off, suckers removed from the deflowered plants, and poison applied for worm control.

attention.



allowed to absorb some moisture from
 s regained enough moisture, it is care-
 es. These sorted leaves of uniform
 undles or "hands" ready to be sold.

Harvesting starts as soon as the bottom leaves begin yellowing. Single leaves—3 to 5 at a time at different intervals—are pulled from the stalk as they ripen. Below: Harvested tobacco is strung on sticks and cured by hanging for 3 to 5 days over hot-air flues in barns where temperature and humidity are carefully controlled.





Thar's Gold In Them Thar Vaults

Are you a numismatist? That's a four-bit word for coin collector. If you aren't one and don't know anybody who is, chances are you haven't seen a gold coin since Uncle Sam impounded them in 1933.

But even though American gold coins are pretty scarce these days, there's considerably more gold around now than there was in the 30's. It's only partly right to conclude that Uncle Sam owns it all, however. It's dead wrong to think it no longer has any connection with our money.

HOW MUCH GOLD IS THERE? At the end of December of last year, official U. S. gold holdings were about \$22.9 billion—almost three and a half times as much metal as we had in coins and bullion when Uncle Sam called in the gold in 1933. That's a lot of gold—22,391 ordinary tons of it—enough to furnish ten ton loads for 2,239 trailer trucks.

No one knows how much additional gold is held in coin collections, hidden away in long-forgotten hoards, or tied up in industrial, professional, and artistic uses. It's quite likely, however, that this gold, too, would provide cargo for more trucks than one might think.

A glance at the accompanying chart shows that the United States has quite a healthy slice of the world's gold. At the end of December, official U. S. holdings were almost 1.4 times as great as those of international institutions, foreign central banks, and other governments (except Russia, which publishes no statistics). Germany's stockpile was the second largest, and those of the United Kingdom and Switzerland were next in line.

GOLD AND THE FEDERAL RESERVE The Federal Reserve Banks hold claims against most U. S. gold—even that stored in such caches as Fort Knox, the three U. S. mints, and the New York Assay Office. On December 31, Federal Reserve claims totaled more than \$22 billion—about 97% of the U. S. gold stockpile.

The Federal Reserve Banks currently acquire their claims chiefly as a by-product of Treasury gold purchases. Any time the Treasury (which has a virtual monopoly over the purchase and sale of gold in this country) buys gold domestically or from abroad, it makes payment by drawing a check on its balance with a Federal Reserve Bank. Afterwards, the Treasury generally rebuilds its balance at the Reserve Bank by “depositing” gold certificates equal to the value of the gold. The Treasury keeps the gold itself under lock and key to secure the gold certificates, which are in effect “warehouse receipts” for an equal amount of gold.

These gold certificates differ from those that circulated in the 30's, and cannot be spent or paid out to member banks. Instead, they serve as reserves for the deposits and note liabilities of the Federal Reserve Banks. By law, each Reserve Bank must hold at least 25% in gold certificates back of all its deposits and Federal Reserve notes in actual circulation. Currently, their reserves run nearer 45%.

These reserve requirements provide the main connecting link between American money and gold. In the case of Federal Reserve notes, the relationship is quite obvious since these are directly backed by about 45% in gold certificates.

The link is less evident between gold and de-

mand deposits—the largest part of our money supply. In the case of member banks, the gold is two steps removed from deposits. The gold certificates back member bank reserve balances at the Reserve Banks, and member bank reserves support customers' deposits. Since member bank reserve requirements are $19\frac{1}{2}\%$, $17\frac{1}{2}\%$, or $11\frac{1}{2}\%$ of demand deposits (depending upon the location of the bank), such deposits are in effect secured by about 8.8%, 7.9%, or 5.2% in gold (45% of $19\frac{1}{2}\%$, $17\frac{1}{2}\%$, and $11\frac{1}{2}\%$). Actually, the gold backing is somewhat higher since member banks typically hold some excess reserves and some vault cash partly backed by gold.

There's also a direct connection between gold and nonmember bank demand deposits. Typically, nonmember banks hold their required reserves in the form of vault cash (such as the gold-secured Federal Reserve notes) or deposits with correspondent banks. The correspondents in turn generally secure their deposits with gold-backed reserves at the Federal Reserve or with correspondent banks that do hold such reserves. In every case, somewhere up the line there's some gold backing.

UNCLE SAM'S OTHER GOLD On December 31, Uncle Sam held about \$772 million in gold in addition to that "mortgaged" to the Federal Reserve Banks. Approximately \$76 million of this—a block against which no gold certificates have

been issued—was held by the Treasury's Exchange Stabilization Fund.

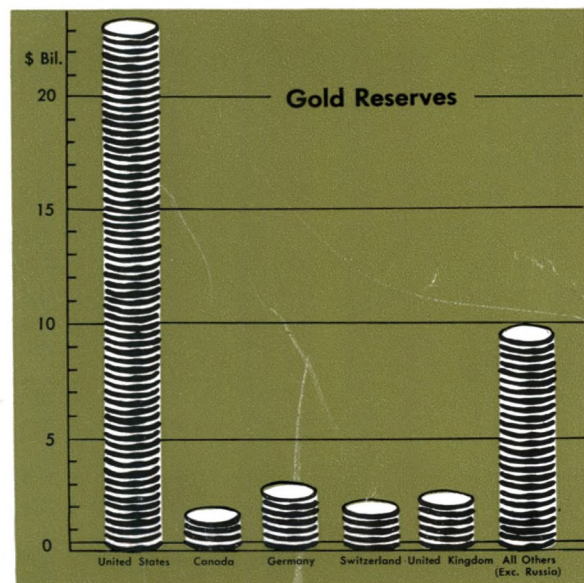
About \$32 million was pledged to back an equal amount of pre-1933 "yellowback" gold certificates still listed as outstanding. Most of these probably are lost, destroyed, or in the hands of collectors or foreigners, but the law still requires the Treasury to secure them with 100% in gold.

Another \$156 million secured the \$347 million United States notes (the "greenbacks" of the Civil War era) and the \$1 million Treasury notes of 1890 still in use.

The remaining \$508 million was "free" gold against which the Treasury could issue gold certificates if it wished to rebuild its Federal Reserve balances.

FOREIGN GOLD IN THE UNITED STATES The second largest gold stockpile in this country—over \$6 billion at the end of last December—is held under "earmark" at the Federal Reserve Bank of New York for foreign governments, central banks, and international institutions. Ordinarily, when such holders buy U. S. gold, they simply request that the gold be placed under "earmark" for them at the Bank. Conversely, when they sell gold, it generally is removed from "earmark" and turned over to the Treasury—often by way of the Exchange Stabilization Fund. This procedure enables the gold to be transferred between owners without all the risk, expense, and difficulty of transporting the gold overseas.

At the end of 1957, Uncle Sam owned almost \$23 billion worth of the \$39 billion in gold reserves held outside of Russia.



Gold "earmarked" for foreigners in the vault of the New York Reserve Bank. Each of these 27 lb. bricks is worth \$14,000.



The Fifth District

The weather was much in the business news last month. Both production and sales were adversely affected by unusually severe cold spells, and city wide shutdowns occurred in the wake of snow storms in Baltimore, Washington, and other centers. The weather thus assured a continuation of the declines that had been evident in January.

January employment and unemployment changes give an accurate summary of that month. Nonfarm employment fell more than usual from December to January, and hours worked dropped both below the December average and under January a year ago. The December-January decline in manufacturing employment was twice as great this year as last, with durable industries continuing to show the largest losses. Insured unemployment increased substantially during the month and by early February reached more than twice the year-ago totals in Maryland and West Virginia.

Detailed news of individual industries brought a little warmth to ease the general chill. Hosiery, alone among the textile industries, faced an encouraging buying interest. Cigarettes—the recession-proof comfort of Virginia and North Carolina—showed production increases from December and from a year ago. Building permits in Janu-

ary made a more-than-expected pickup, with many cities surpassing January 1957. Department and furniture stores did well in January, providing hope that retail sales will improve with the appearance of better weather.

FARM INCOME Sharply reduced production of important cash crops—principally cotton and flue-cured tobacco—brought an 18% decline in District farmers' 1957 cash receipts from crop marketings. A small increase in livestock receipts was only partially offsetting, and total receipts fell 10% below those of 1956. Hardest hit was North Carolina, where the cash return fell 15% from its billion-dollar total in 1956.

Soil bank payments in the District totaled \$38 million, compared with the \$219 million drop in receipts from marketings.

BITUMINOUS COAL Mining output has declined further as a result of weakening markets both at home and abroad. District mines produced 27% less coal in the first week of February than the same week a year before, bringing the first six weeks' total 15% under 1957.

Nationally bituminous coal was mined at a seasonally adjusted annual rate of 389 million tons from late December through the first week of February. This compares with 488 million tons produced in 1957 and industry forecasts of 475 million tons in 1958.

LUMBER District pine and hardwood mills found bad weather a double handicap in retarding production and cutting demand as construction was held up. In addition, furniture makers have for some time been ordering with caution.

TEXTILES A lack of buying of industrial fabrics has contributed to further cutbacks in textile weaving operations. Cotton consumption declined again in January, and the indications were for a further drop in February, as buying continued on a hand-to-mouth basis characterized by quick deliveries.

The persistent lag in demand for synthetics has affected nylon and other new fibers as well as rayon and acetate. Operations have been curtailed at nylon and orlon plants, although trade sources predict an early upturn from present sales level.

Snow and subfreezing weather last month combined to disrupt production and sales throughout Fifth District states.



TRADE Department store sales in January held close to the December level, after taking account of seasonal factors, and were equal to sales of January 1957. Post-Christmas clearances apparently played an important part in the large volume of apparel and household appliance sales that contributed to the good volume. Furniture stores reported sales for the month that also equaled December's, though falling short of the previous January.

Weekly reports in February showed the effects of bad weather on department store sales. The third week of the month—marked by heavy snow storms—was nearly one-third below its counterpart last year.

BANKING Loan demand at District member banks reflects quite clearly the continued slide in District business activity. During the first two months of the year—typically a period of slack bank loan demand—total loans fell much more than can be accounted for by seasonal factors alone. At District weekly reporting member banks, the drop was over 3%—a decline almost twice as great as those of the like periods of 1956 and 1957.

Business loans—a much better reflection of economic activity—have taken a relatively greater tumble so far this year. These loans at District weekly reporting member banks fell nearly 5% during the first two months of the year—well over twice as much as they slipped during January and February of the two previous years.

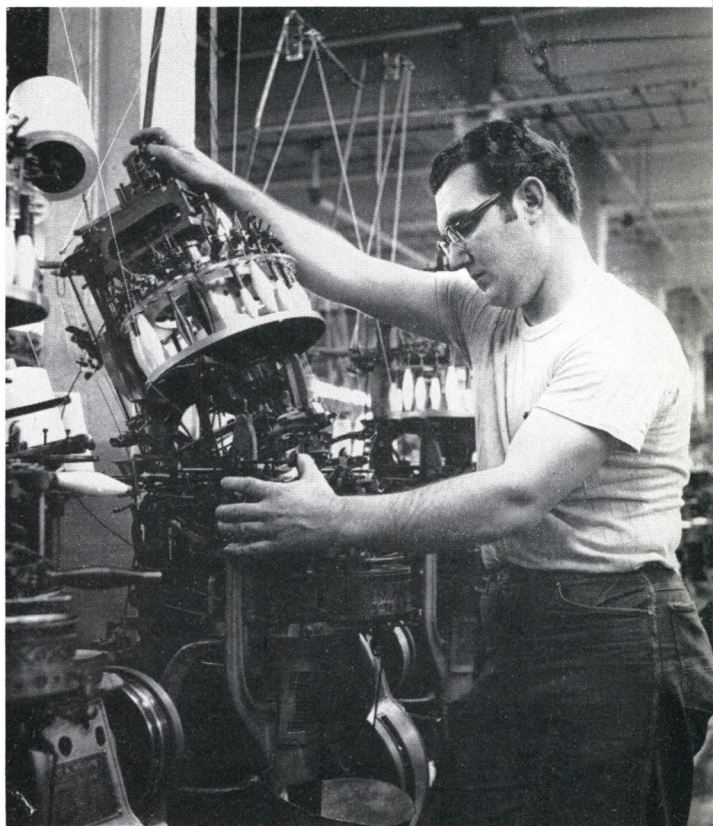
BANK DEBITS in 34 District cities were down 4% to \$6.5 billion in February from a year ago. Declines in the District of Columbia, Maryland and North Carolina accounted for the downturn. This was the first time since September 1956 that debits to demand deposits had been less than the corresponding year ago period.

TIME DEPOSITS of District member banks rose by \$39 million during January as compared with \$28 million in January 1957.

BUSINESS FAILURES rose sharply in January, after seasonal correction, and were nearly half again larger than a year ago.

Hosiery

One currently cheerful note in the District is the rather abrupt and substantial improvement in business for the hosiery industry. The cold



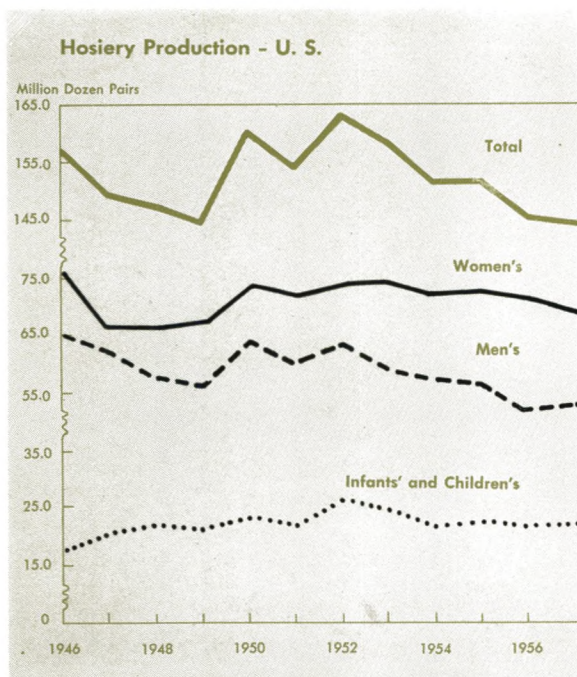
Long life of nylon socks has slowed the flow of replacements from circular knitting machines like this one in North Carolina.

weather apparently stimulated consumer demand, and retailers have been buying in preparation for pre-Easter sales.

The change is welcome, for the hosiery industry has felt left behind in the postwar period of expanding production and rising prices. Hosiery prices have been in a declining trend since 1948, and production, which had shown no sustained growth for some years, has shrunk since 1952. The change is particularly welcome in this area, for more than one-half of the nation's hosiery output comes from Fifth District states, and the proportion is growing. North Carolina alone accounted for nearly one-half of the total in 1957.

The hosiery industry caters to the entire population of the country—women, men, and children. For women the industry produces products classified as full-fashioned (those with the seam in the back), seamless, and anklets. Any may be made from one or more yarns, but nylon is now the chief fiber used and is increasing its dominant role.

For men the industry produces half hose (those



Production declines have plagued all major hosiery categories, but men's socks have led the downward movement.

with the ribbed top), slack socks, anklets, bundle goods (heavy yarn work socks), crew socks, and athletic socks; and for infants and children, various sizes from anklets to full length stockings. Cotton, rayon, and wool have traditionally been the important fibers used in men's half hose and slack socks, while cotton or wool has been used in other types of men's hosiery. Nylon in recent years has become increasingly important in making both men's half hose and slack socks and in reinforcing children's stockings.

The nation's hosiery production in 1957 totaled 145 million dozen pairs, a drop of 19 million dozens from 1952's output. Women's hose—which account for nearly one-half of the total—produced a small part of this decline. The major part came in the men's field.

More exactly, the major part of the drop was concentrated in men's half hose and slack socks. Last year's output of 53 million dozen pairs was one-sixth below 1952. While nylon products expanded, the gains failed to offset losses in hose produced from cotton, rayon, and woolen yarns. The improved wearing qualities of nylon men's hose have made them more attractive to consumers and at the same time have cut back the replacement demand for hose. Socks made of

cotton or rayon yarns were expected to wear out—and did so. Nylon and nylon-reinforced hose seem never to wear out, however, but are downgraded to work purposes and the like when their owners grow tired of them. Thus depressing repercussions are felt in bundle goods production as well as in the directly competing cotton and rayon hose.

Infants' and children's hose have shared in the decline, although to a lesser extent. Very likely the same factor has been the dominant one, the lasting qualities of nylon and nylon-reinforced hose.

Women's hosiery accounts for nearly one-half of total production and has proved more stable in recent years than has men's or children's. This has, in part at least, been due to the nylon revolution's having taken place earlier, but this same fact leads to dissatisfaction on the part of hosiery manufacturers over the failure of the market to grow. The female population old enough to wear women's hose has steadily increased but bought fewer stockings.

Several reasons have been advanced. The social acceptance of bare legs in warm weather has obviously cut requirements. Consumer stocks are apparently well filled. Hosiery styles have not been extreme in recent years, and obsolescence is thus not important in generating new consumer needs.

The failure of output to grow has been made more difficult for manufacturers by shifts in women's preferences from full-fashioned to seamless hose. Even as total women's hosiery output shrank from 1952 to 1957, seamless nylon production nearly quadrupled. The required changes in equipment have made the adjustment of capacity to demand a prolonged process.

PHOTO CREDITS

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