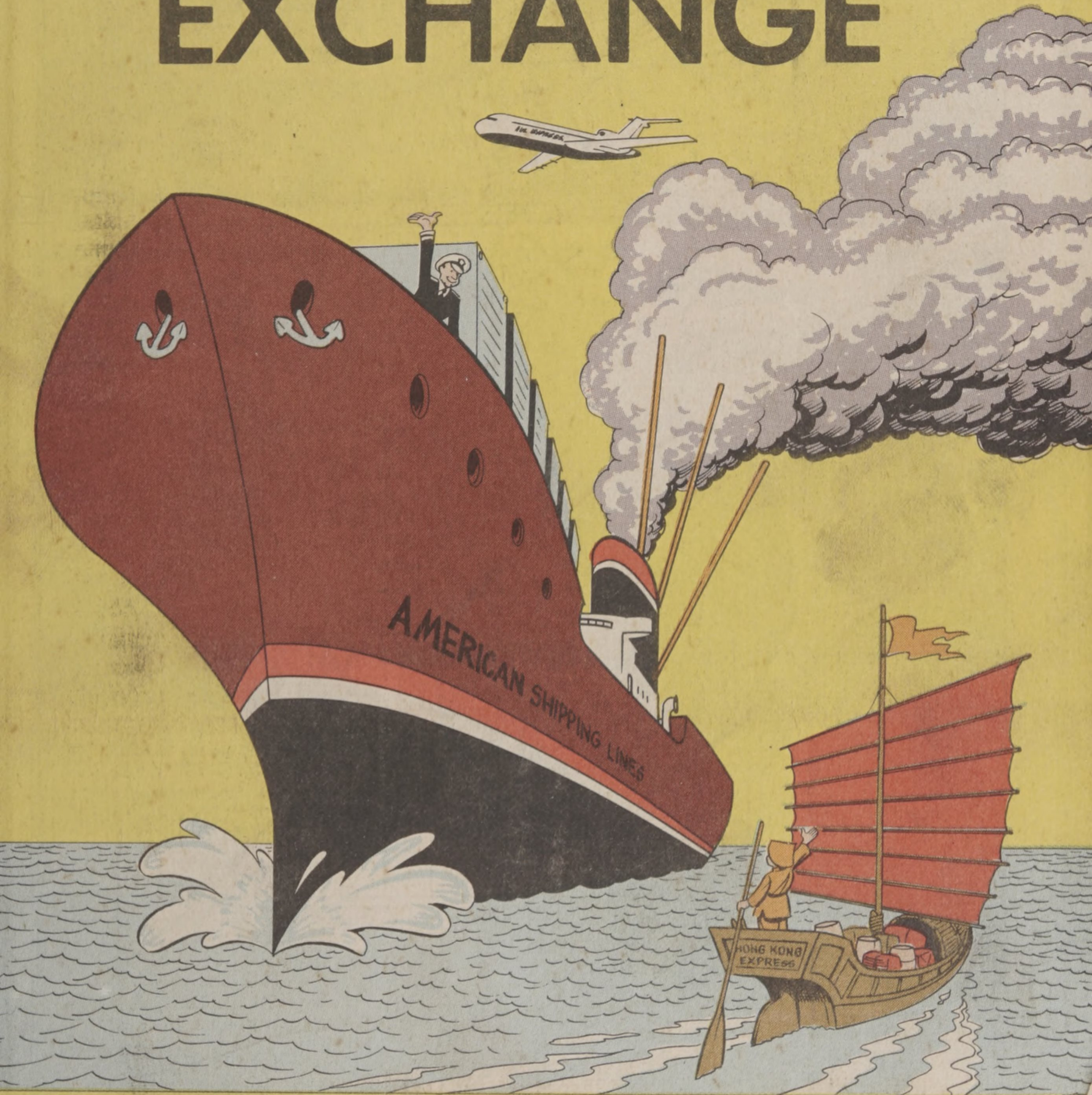


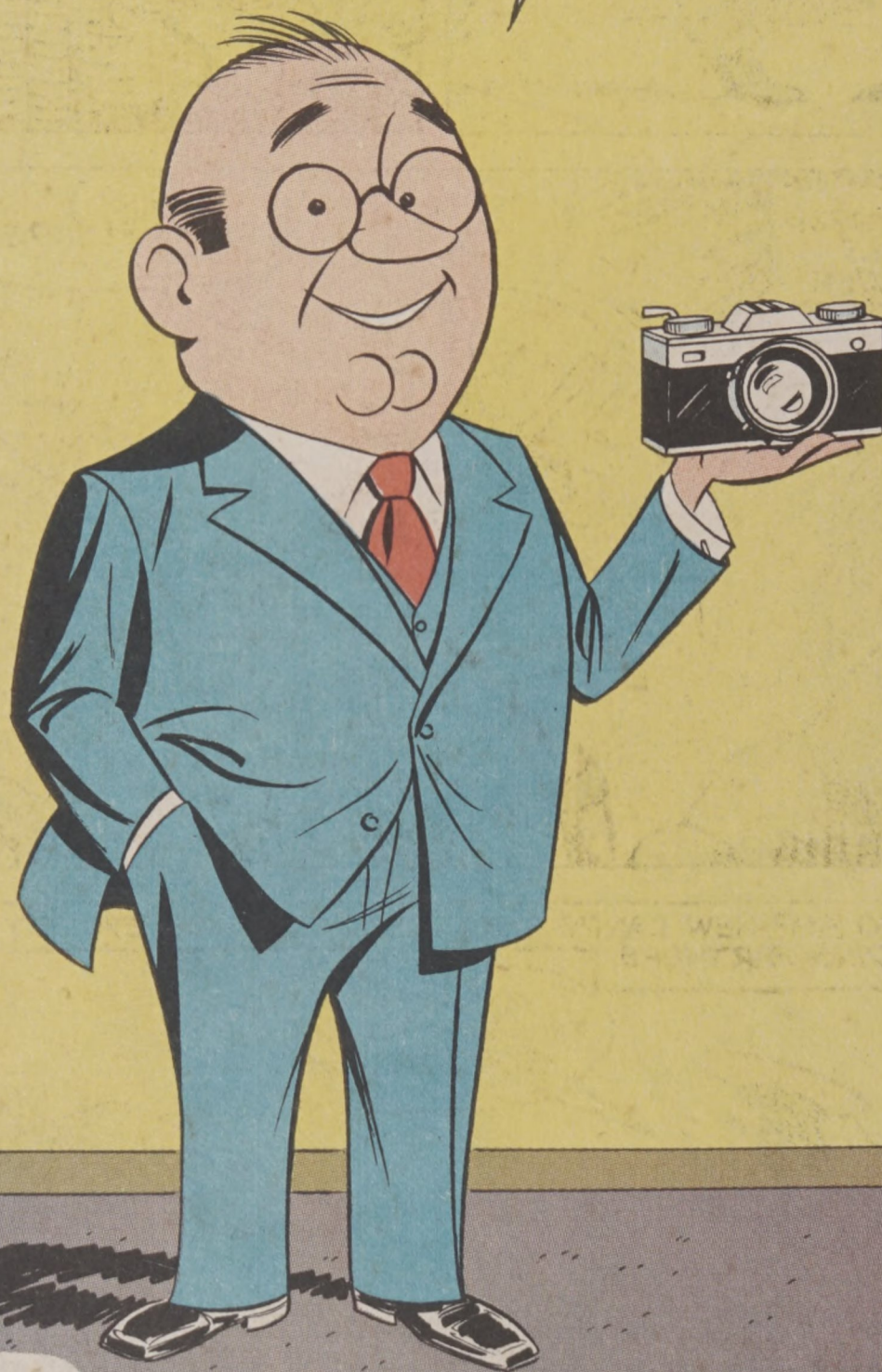
THE STORY OF  
**FOREIGN TRADE**  
AND  
**EXCHANGE**



**FEDERAL RESERVE BANK  
OF NEW YORK**



THIS SUIT AND MY CAMERA WERE MADE  
IN THE FAR EAST. MY WIFE USES FRENCH PERFUME  
AND OWNS SOME STOCK IN A GERMAN COMPANY.  
CAN YOU EXPLAIN WHY SUCH INTERNATIONAL TRADE  
AND INVESTMENT TOOK PLACE? OR WHY, SAY, 1500  
SPANISH PESETAS IS THE EQUIVALENT OF \$10 AND  
NOT \$7. WE ARE GOING TO FIND THE ANSWERS  
TO THESE QUESTIONS. BUT FIRST LET'S TURN BACK  
THE CLOCK A BIT.



ART BY  
AL WENZEL



FOR CENTURIES, MEN FOUGHT TO DOMINATE TRADE. THEY FOUGHT FOR BOOTY AND ADVENTURE, BUT THEY ALSO FOUGHT FOR THE POWER AND WEALTH OF THEIR NATIONS.

WADDYA SAY WE SPLIT IT 50-50!



ACCORDING TO THE THEORY OF THE TIME, **MERCANTILISM** (1500-1850s), A NATION'S POWER AND WEALTH WERE ASSURED IF IT HAD VAST STORES OF GOLD OR SILVER.

EVERY TIME I GET A LITTLE AHEAD, THE CASTLE GETS REDECORATED.



COUNTRIES ACQUIRED PRECIOUS METALS THROUGH PLUNDER OR DISCOVERIES OF NEW MINES.

I THINK I PREFER PLUNDER!

ME TOO.



THEY COULD ALSO FIND NEW LANDS THEY COULD COLONIZE, EXPLOIT AND MAKE THEIR EXCLUSIVE TRADING PARTNERS.

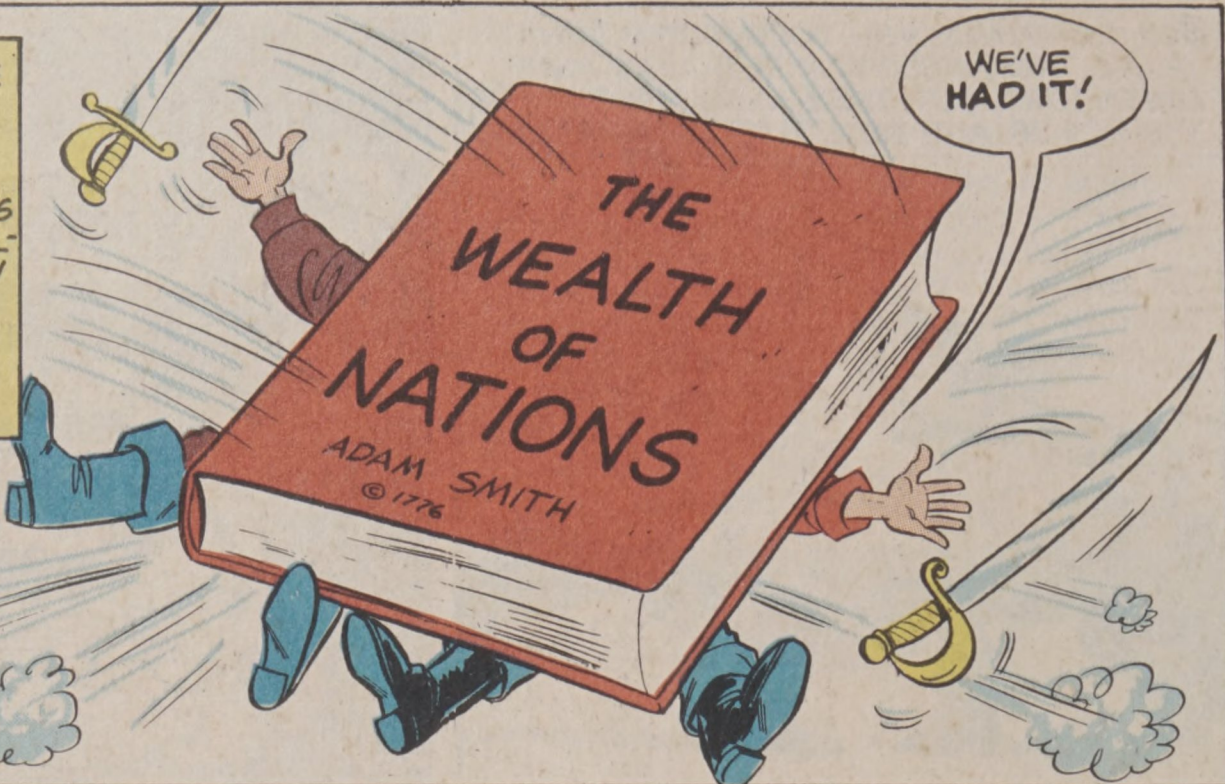
SEE ANY GOLD?

YEAH! ONE OF THOSE NATIVES HAS A GOLD WATCH!

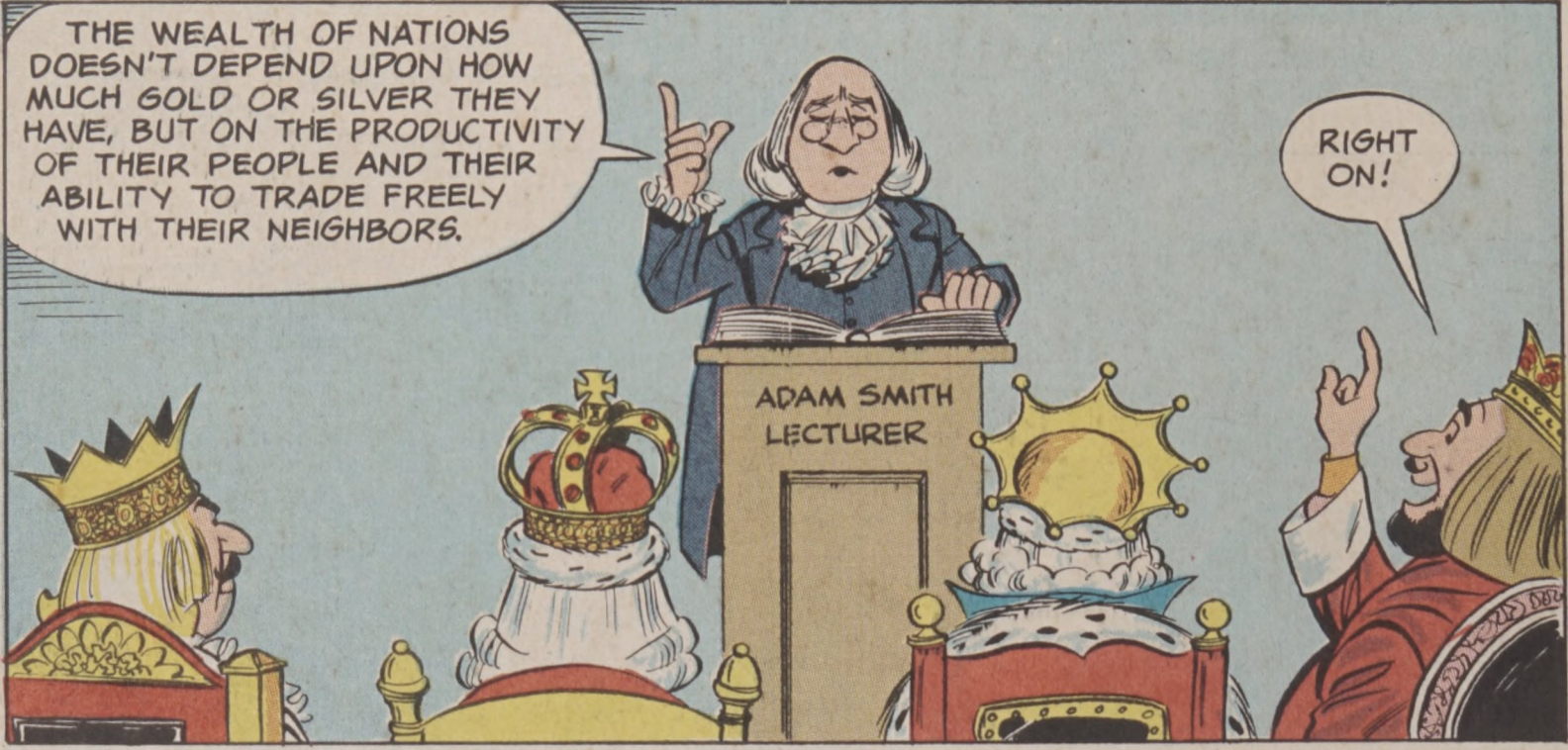




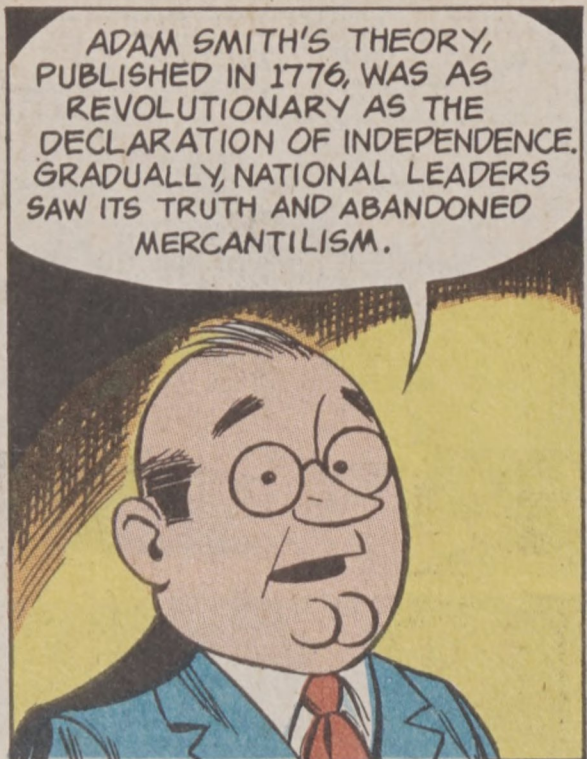
HOWEVER, IN THE LATE 1700'S, CENTURIES-OLD RESTRICTIVE TRADE PRACTICES WERE SUBSTANTIALLY REDUCED. THEY WERE NOT FINISHED BY A BATTLE BUT BY-- A BOOK.



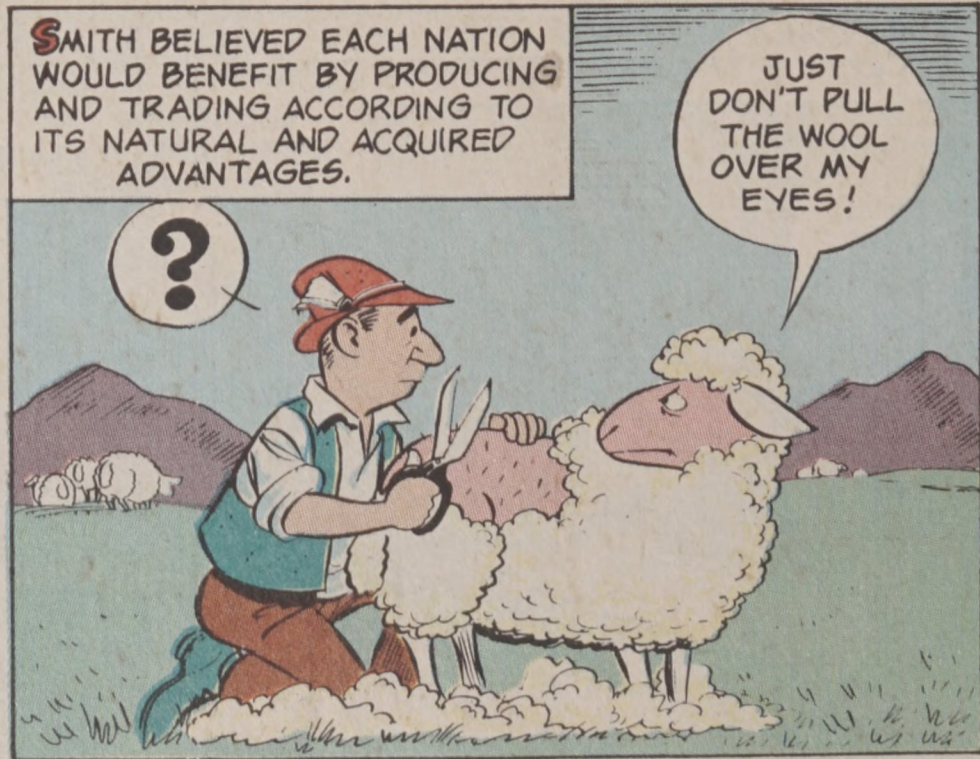
THE WEALTH OF NATIONS DOESN'T DEPEND UPON HOW MUCH GOLD OR SILVER THEY HAVE, BUT ON THE PRODUCTIVITY OF THEIR PEOPLE AND THEIR ABILITY TO TRADE FREELY WITH THEIR NEIGHBORS.



ADAM SMITH'S THEORY, PUBLISHED IN 1776, WAS AS REVOLUTIONARY AS THE DECLARATION OF INDEPENDENCE. GRADUALLY, NATIONAL LEADERS SAW ITS TRUTH AND ABANDONED MERCANTILISM.



SMITH BELIEVED EACH NATION WOULD BENEFIT BY PRODUCING AND TRADING ACCORDING TO ITS NATURAL AND ACQUIRED ADVANTAGES.





NATURAL ADVANTAGES INCLUDE CLIMATE LIKE THE WARM SUN THAT GROWS ORANGES IN SPAIN BUT NOT IN ENGLAND...

NOW, THAT'S WHAT I CALL ORANGE AID!

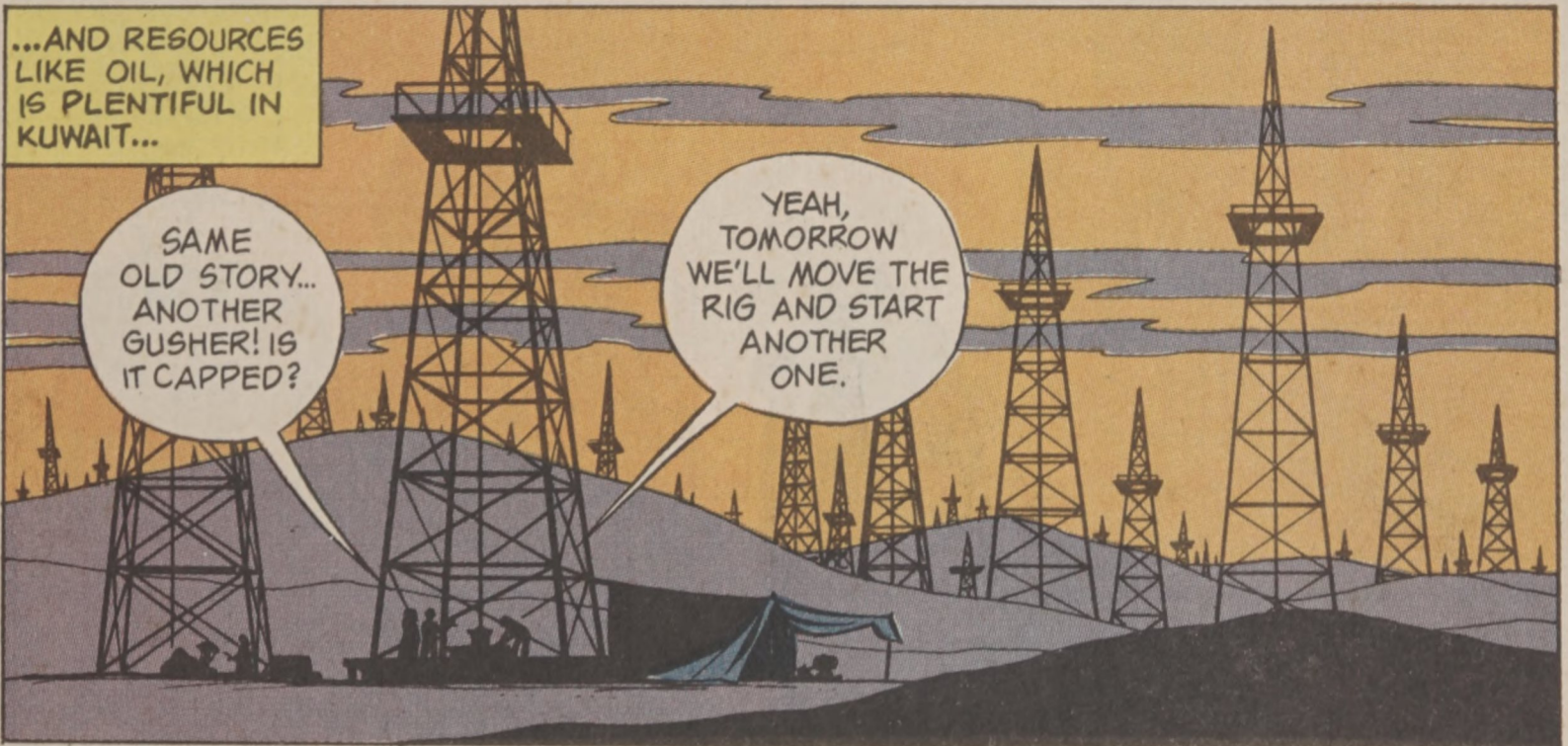
I HEAR WE GOT THAT FOREIGN LOAN!



...AND RESOURCES LIKE OIL, WHICH IS PLENTIFUL IN KUWAIT...

SAME OLD STORY... ANOTHER GUSHER! IS IT CAPPED?

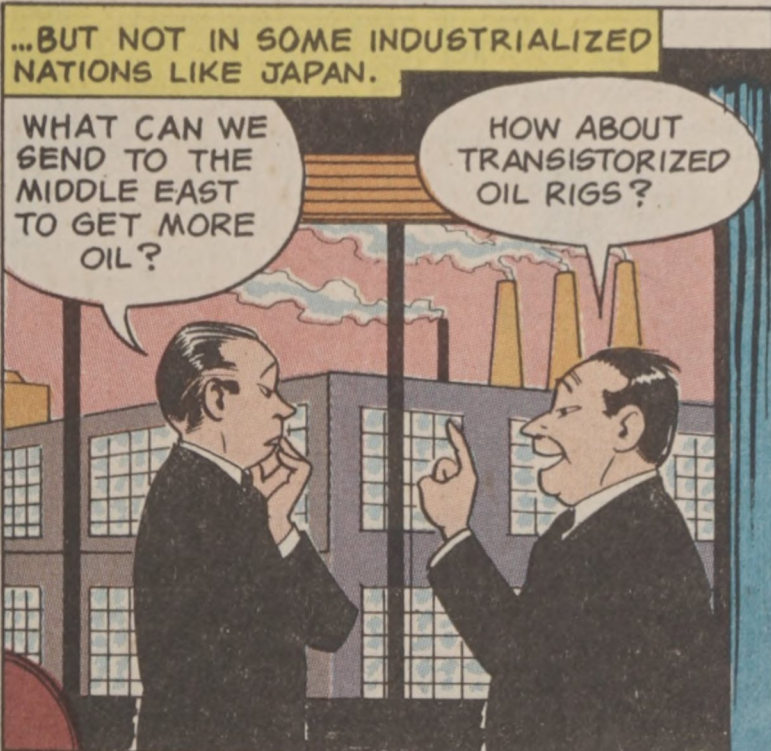
YEAH, TOMORROW WE'LL MOVE THE RIG AND START ANOTHER ONE.



...BUT NOT IN SOME INDUSTRIALIZED NATIONS LIKE JAPAN.

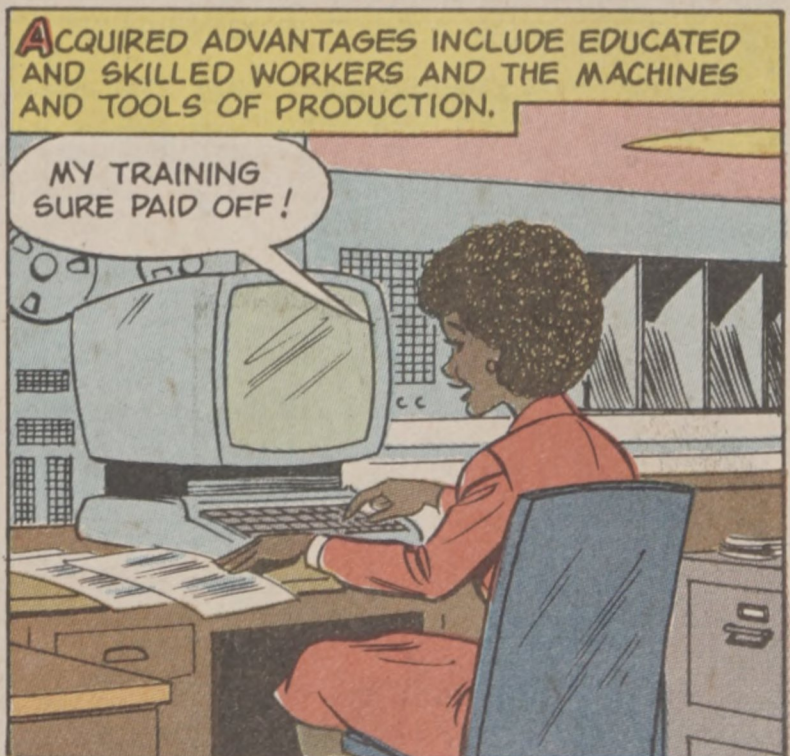
WHAT CAN WE SEND TO THE MIDDLE EAST TO GET MORE OIL?

HOW ABOUT TRANSISTORIZED OIL RIGS?

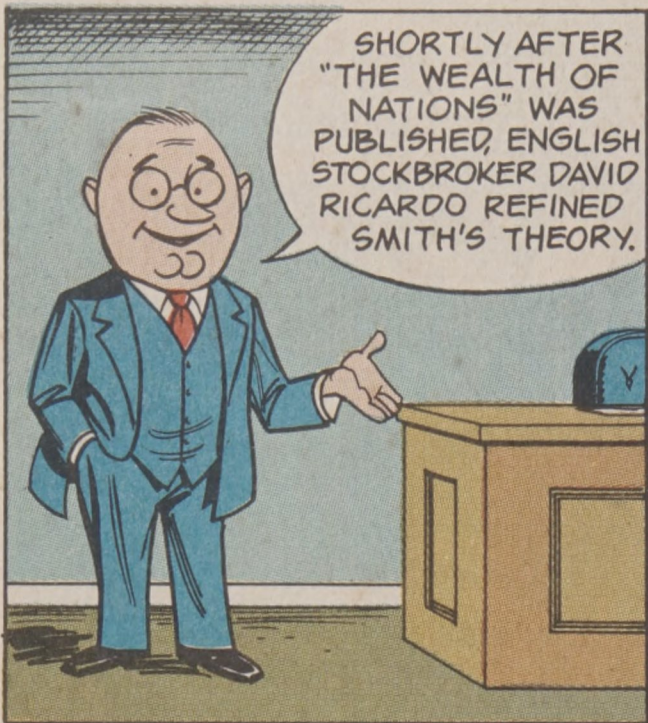


ACQUIRED ADVANTAGES INCLUDE EDUCATED AND SKILLED WORKERS AND THE MACHINES AND TOOLS OF PRODUCTION.

MY TRAINING SURE PAID OFF!



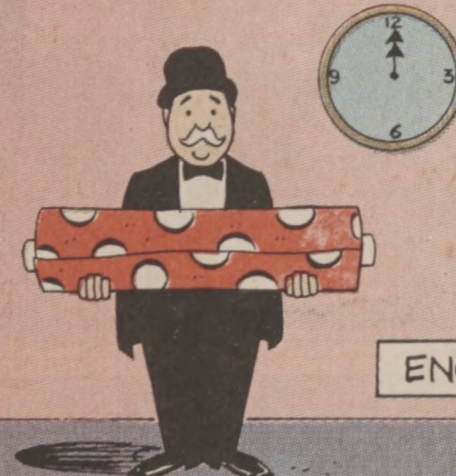






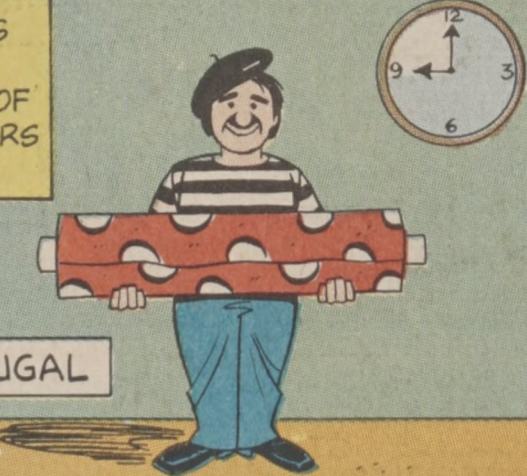


THE SAME IS TRUE IN TRADE. FOR EXAMPLE, SUPPOSE BOTH ENGLAND AND PORTUGAL PRODUCE WINE AND CLOTH.



ENGLAND

IN ENGLAND IT TAKES 12 HOURS OF LABOR TO PRODUCE 1 BOLT OF CLOTH BUT ONLY 9 HOURS IN PORTUGAL.



PORTUGAL



ENGLAND

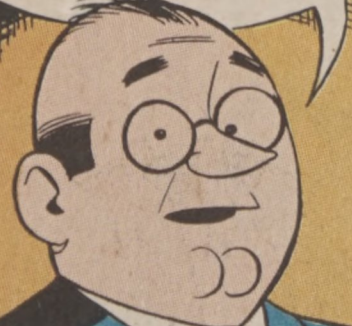
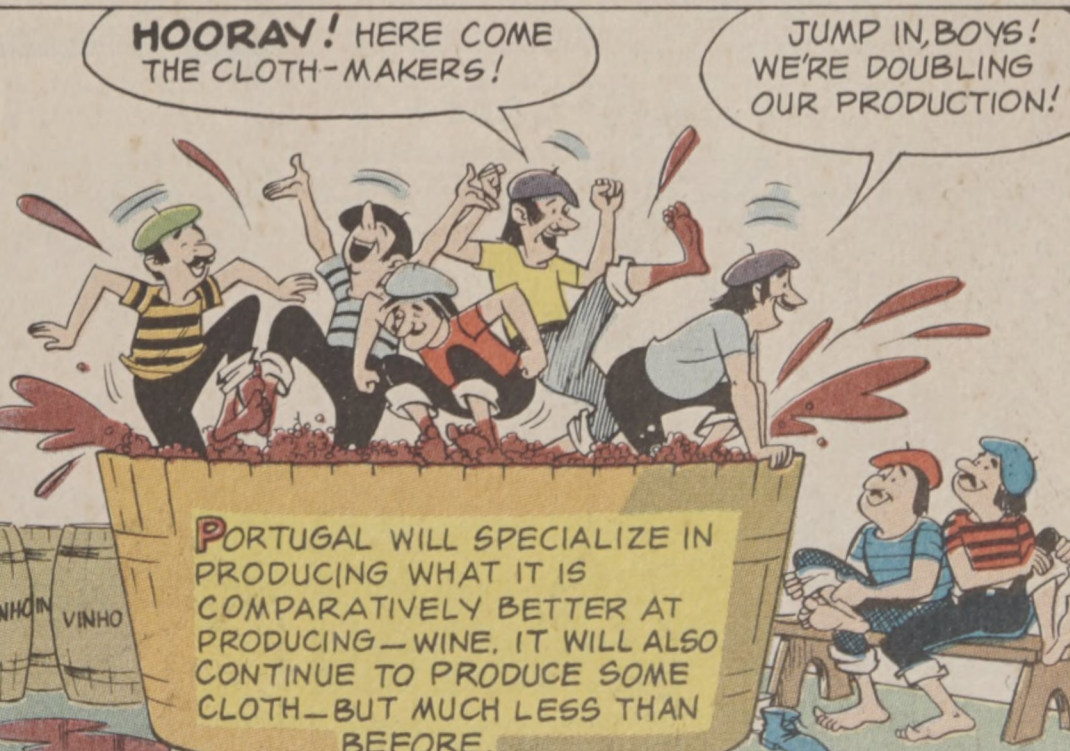
IN ENGLAND IT TAKES 12 HOURS OF LABOR TO PRODUCE A CASK OF WINE BUT ONLY 6 HOURS IN PORTUGAL.



PORTUGAL

ASSUMING LABOR IS THE MOST IMPORTANT INGREDIENT IN THE PRODUCTION OF WINE AND CLOTH, PORTUGAL CAN MAKE EACH PRODUCT CHEAPER BECAUSE IT HAS AN **ABSOLUTE ADVANTAGE** IN PRODUCING BOTH WITH LESS LABOR.

BUT PORTUGAL HAS A **COMPARATIVE ADVANTAGE** IN THE PRODUCTION OF WINE SINCE IT NEEDS 50% LESS LABOR TIME THAN DOES ENGLAND TO PRODUCE A CASK COMPARED TO ONLY 25% LESS LABOR TIME TO PRODUCE CLOTH.

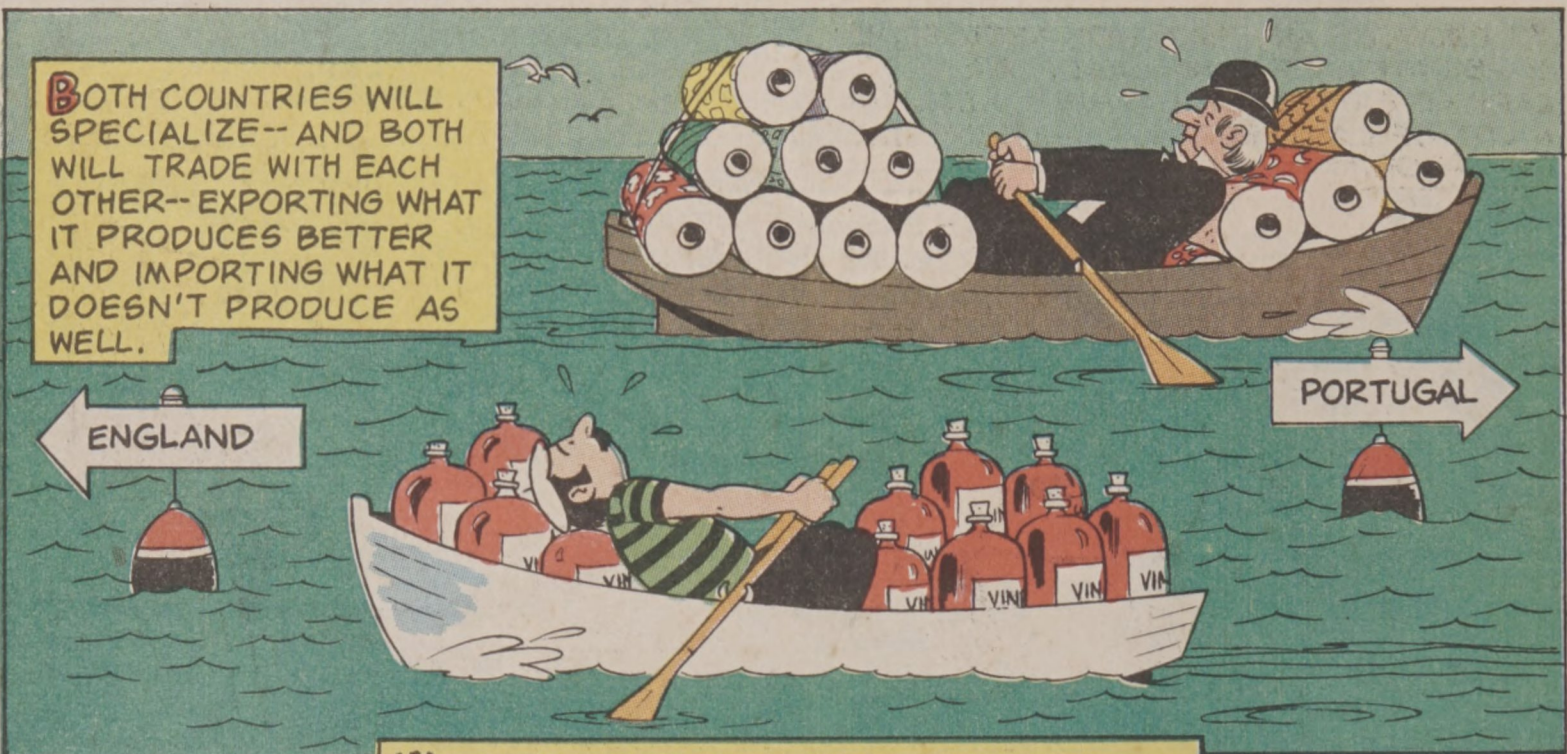



HOORAY! HERE COME THE CLOTH-MAKERS!

JUMP IN, BOYS! WE'RE DOUBLING OUR PRODUCTION!

PORTUGAL WILL SPECIALIZE IN PRODUCING WHAT IT IS COMPARATIVELY BETTER AT PRODUCING—WINE. IT WILL ALSO CONTINUE TO PRODUCE SOME CLOTH—BUT MUCH LESS THAN BEFORE.





WITH SPECIALIZATION AND INTERNATIONAL TRADE BOTH COUNTRIES WILL BE BETTER OFF.





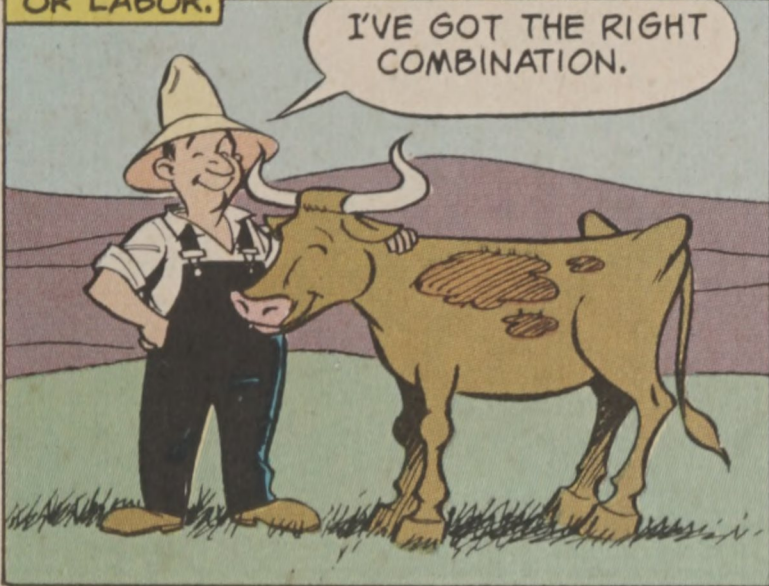
**R**ICARDO'S THEORY WORKED, BUT FOR MORE THAN A CENTURY NO ONE REALLY UNDERSTOOD WHY. IN 1933, SWEDISH ECONOMIST BERTIL OHLIN CAME UP WITH AN ANSWER.

**B**ECAUSE NATIONS HAVE DIFFERENT AMOUNTS OF THE FACTORS OF PRODUCTION, THEY MAY BE CAPABLE OF PRODUCING THE SAME THINGS, BUT NOT AT THE SAME PRICE. HERE'S WHY:

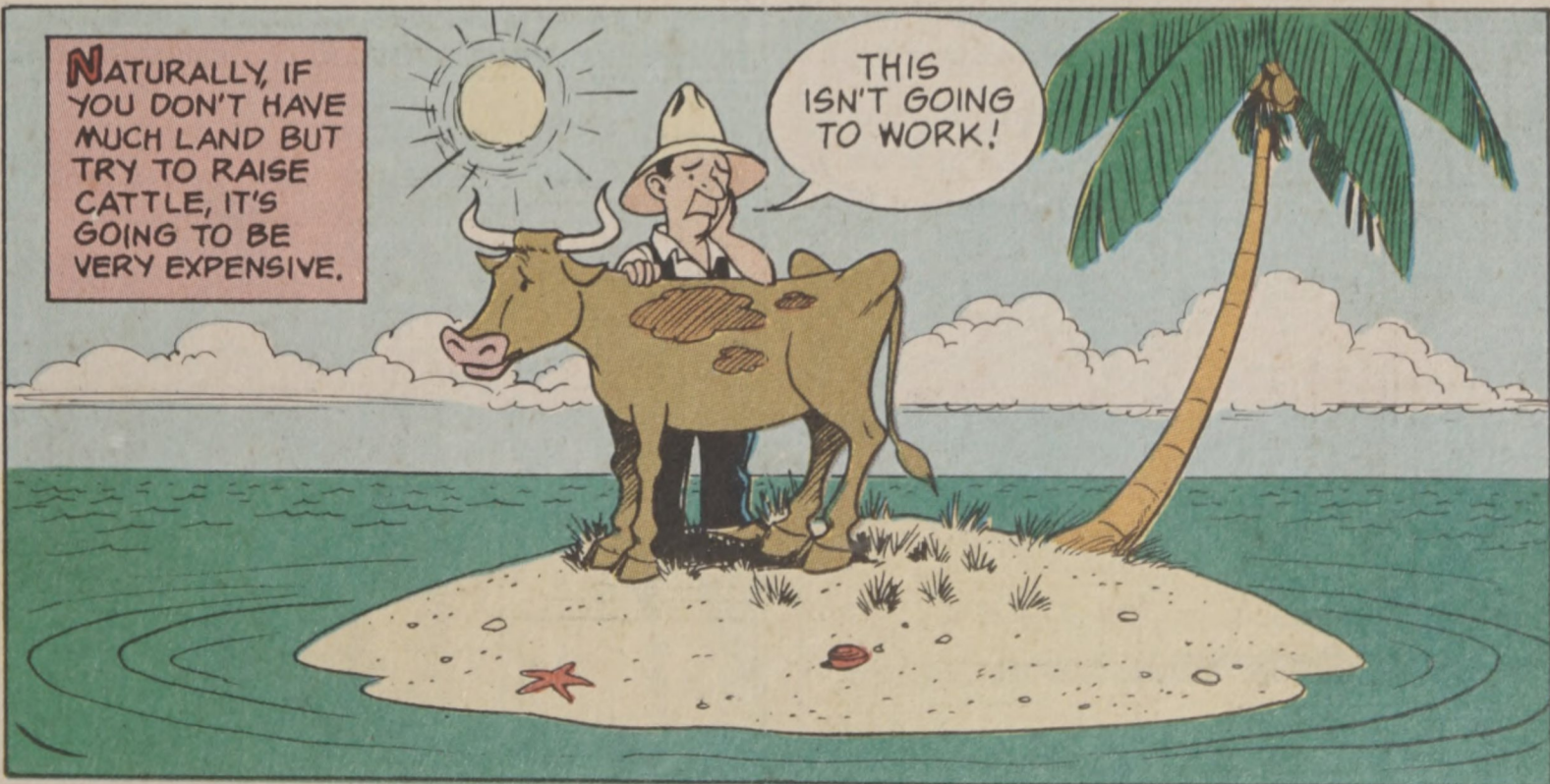


**T**O PRODUCE ANYTHING, YOU NEED SOME COMBINATION OF LAND, LABOR AND CAPITAL. CATTLE, FOR EXAMPLE, REQUIRE A LOT OF LAND, BUT NOT MUCH CAPITAL OR LABOR.

**O**ther items, like this home computer, require a lot of capital or sophisticated machinery, but not much land or labor.



**N**ATURALLY, IF YOU DON'T HAVE MUCH LAND BUT TRY TO RAISE CATTLE, IT'S GOING TO BE VERY EXPENSIVE.

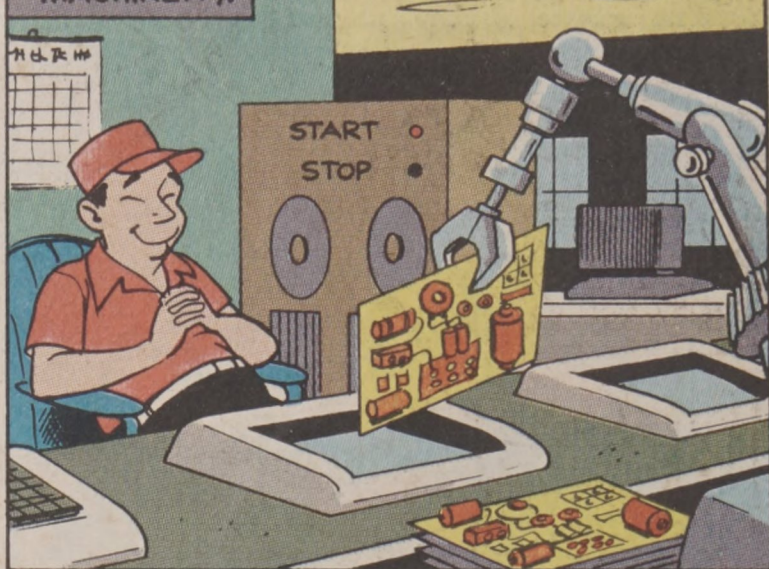




ON THE OTHER HAND, IF LAND IS RELATIVELY CHEAP, CATTLE RAISING WILL BE LESS EXPENSIVE. THE CHEAPEST CATTLE WILL COME FROM THE COUNTRY WITH THE MOST GRAZING LAND.



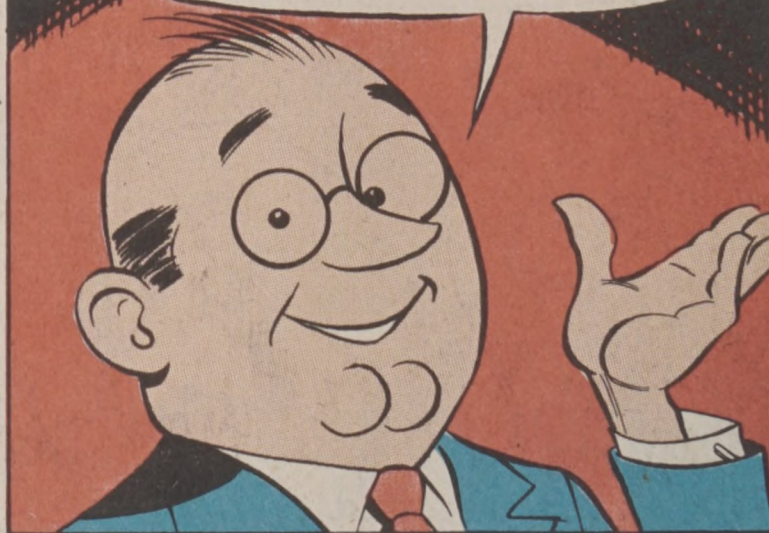
THE CHEAPEST COMPUTER WILL COME FROM THE COUNTRY WITH THE MOST SOPHISTICATED MACHINERY.



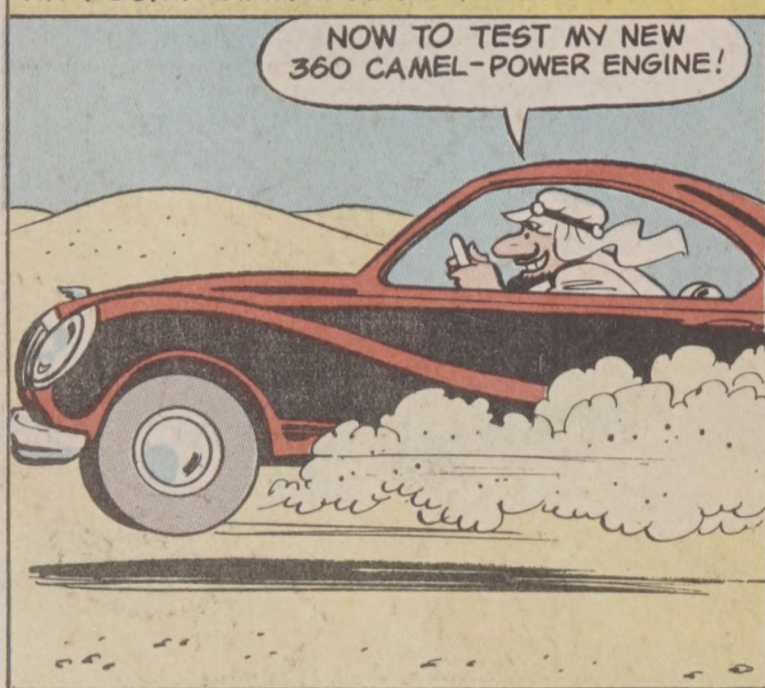
SO, SMITH AND RICARDO WERE RIGHT! AS LONG AS NATIONS SPECIALIZE IN PRODUCING GOODS REQUIRING THEIR MOST ABUNDANT FACTORS OF PRODUCTION, COMPARATIVE ADVANTAGE WORKS.



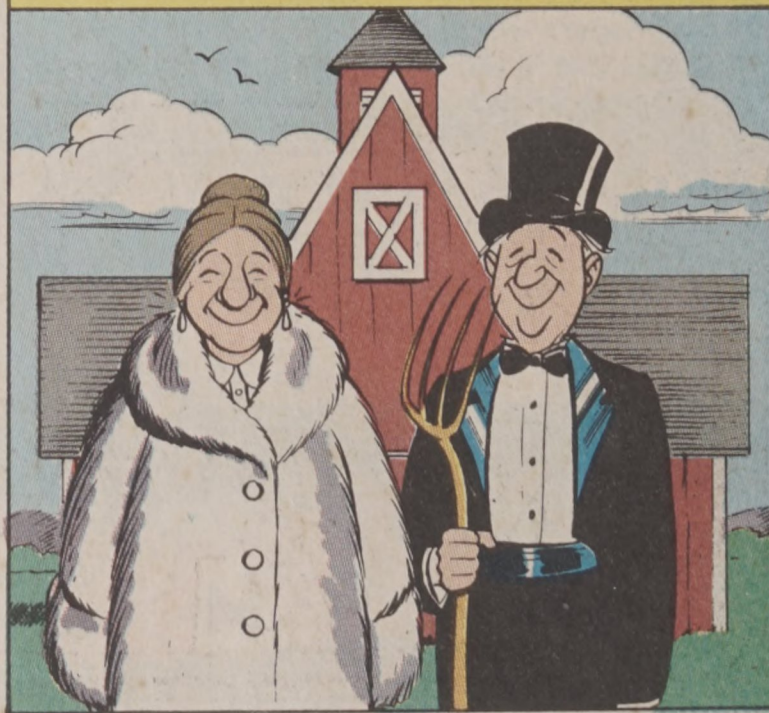
NATIONS TRADE FOR MANY REASONS. CERTAINLY FOR SOME, IT IS TO TAKE ADVANTAGE OF A NATURAL RESOURCE OR TO OBTAIN THINGS THEY CAN'T PRODUCE THEMSELVES.



BUT MOST NATIONS TRADE TO REAP THE BENEFITS THAT COULD COME FROM SPECIALIZING AND TRADING IN ACCORDANCE WITH COMPARATIVE ADVANTAGE.



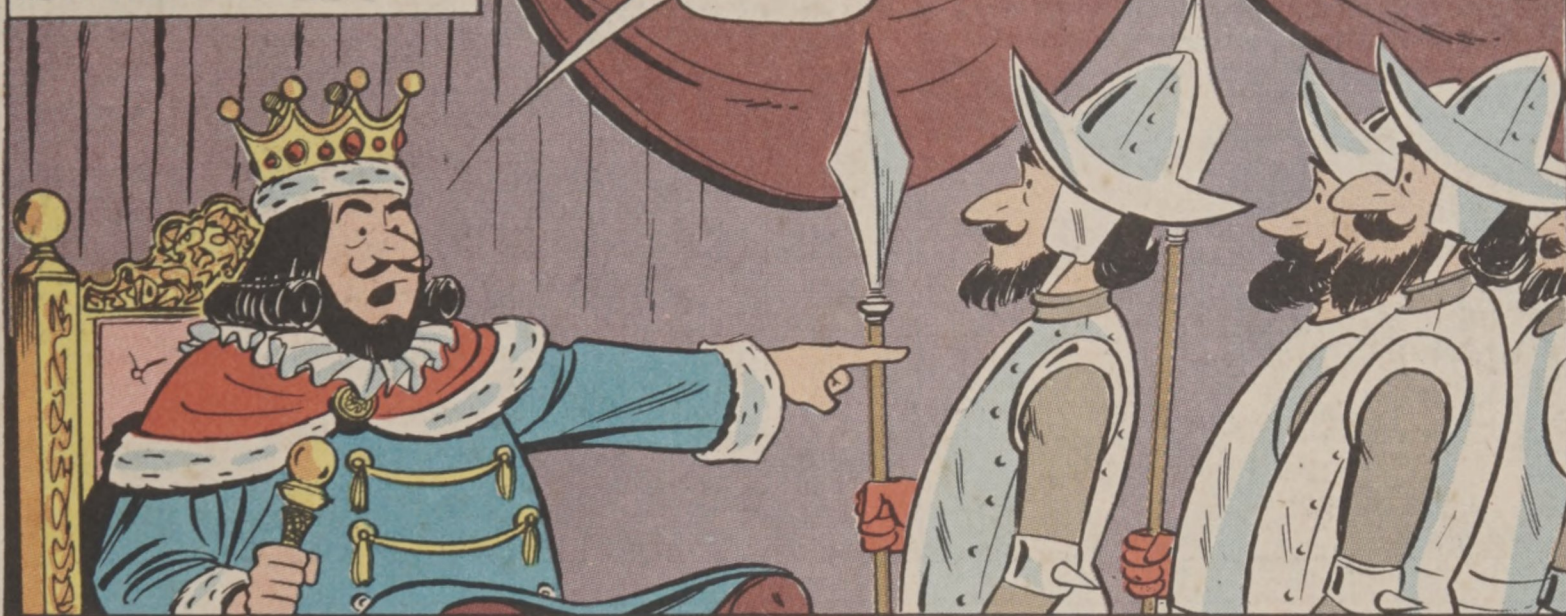
COMPARATIVE ADVANTAGE, COMBINED WITH FREE TRADE, IMPROVES NATIONS' LIVING STANDARDS AND STRENGTHENS THEIR ECONOMIES.





NOW THAT WE KNOW WHY NATIONS TRADE, LET'S SEE HOW THEY PAY FOR IT.

GET GOLD! HUMANELY, IF POSSIBLE, BUT GET GOLD!



THE ORDER KING FERDINAND OF SPAIN GAVE HIS SOLDIERS IN SOUTH AMERICA IN 1511 WAS MORE THAN A ROYAL COMMAND, IT WAS A STATEMENT OF ECONOMIC POLICY.

WELL, THERE GOES THE NEIGHBORHOOD!



GOLD WAS VITAL FOR TRADE IN THOSE DAYS BECAUSE IT WAS, ALONG WITH SILVER, AN ALMOST UNIVERSAL MEDIUM OF EXCHANGE.

WOULD YOU BELIEVE IT'S A GOLDEN CHICKEN!

GOLD ONLY

NO CHECKS  
NO CASH  
NO CLAMS  
NO CHICKENS



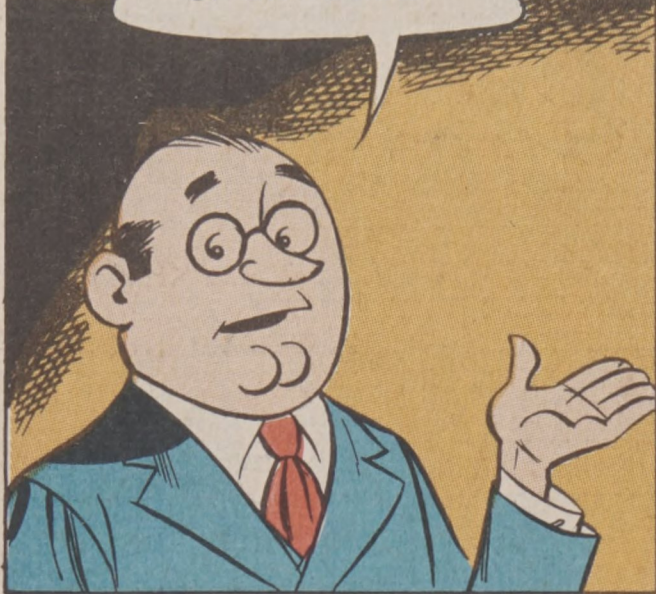
IN MOST OF THE WORLD, ANY FORM OF THESE PRECIOUS METALS WOULD BUY WHAT YOU WANTED, BECAUSE A CERTAIN WEIGHT OF EACH HAD AN AGREED UPON VALUE.

MY FAVORITE COLOR!





BUT GOLD AND SILVER HAVE BEEN REPLACED BY PAPER MONEY PRINTED BY GOVERNMENTS AND BY CHECKING ACCOUNTS ISSUED BY BANKS. WE NO LONGER HAVE A UNIVERSAL MEDIUM OF EXCHANGE.

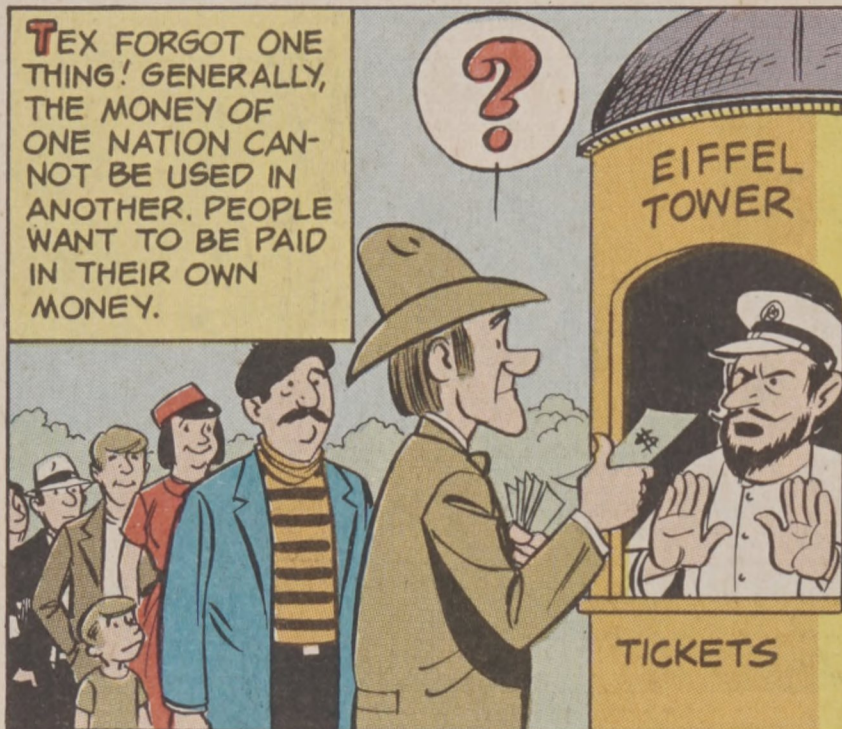


LET'S FOLLOW TEX—AN AMERICAN BUSINESSMAN—ON A GLOBE-CIRCLING BUSINESS TRIP.

AH'VE ALWAYS WANTED TO SEE PARIS! SURE GLAD I BROUGHT PLENTY OF MONEY!



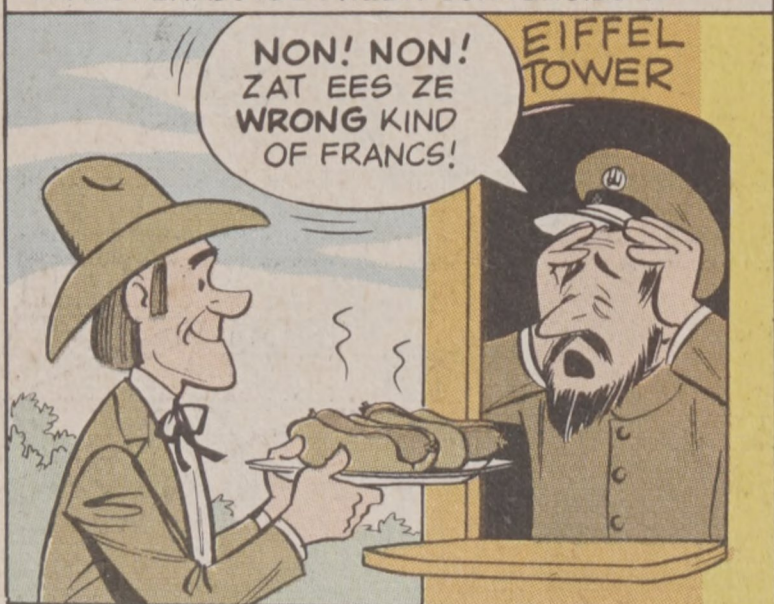
TEX FORGOT ONE THING! GENERALLY, THE MONEY OF ONE NATION CANNOT BE USED IN ANOTHER. PEOPLE WANT TO BE PAID IN THEIR OWN MONEY.



NO DOLLARS! YOU MUST BUY YOUR TICKETS WITH FRANCS!

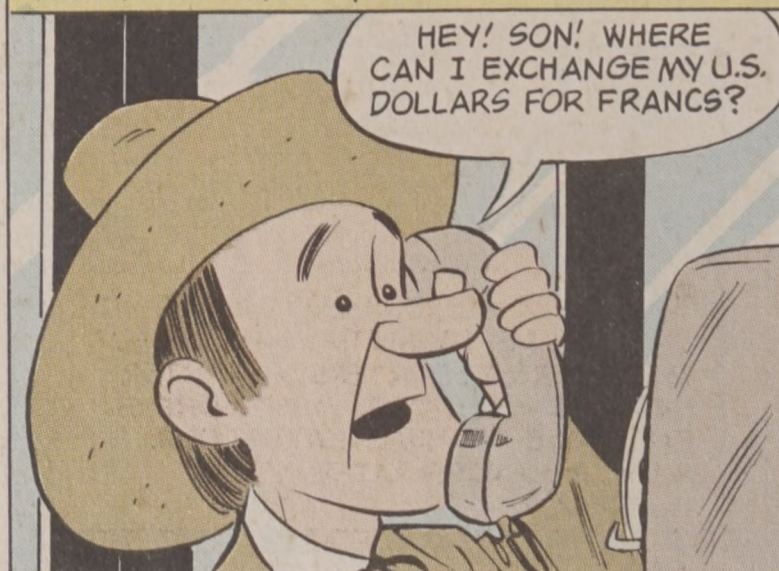
ENTRANCE

THIS MIGHT BOTHER A GLOBETROTTER LIKE TEX IF THERE WASN'T A UNIQUE MARKET THAT ALLOWS PURCHASING POWER TO BE TRANSFERRED BETWEEN CURRENCIES ...



NON! NON! ZAT EES ZE WRONG KIND OF FRANCS!

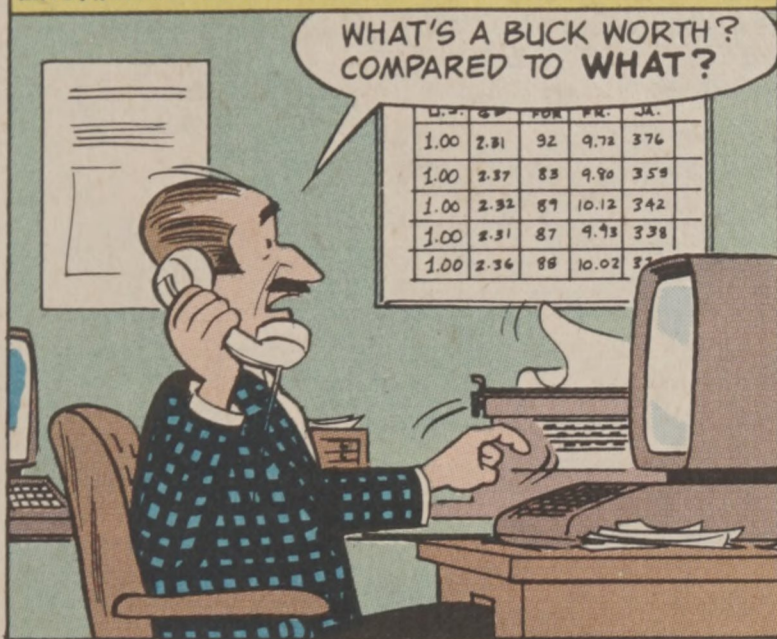
THAT'S THE FOREIGN EXCHANGE MARKET, WHICH IS WHAT WE CALL THE BANKS AND FOREIGN EXCHANGE DEALERS THAT TRADE CURRENCIES IN MAJOR CITIES LIKE NEW YORK, PARIS, AND LONDON, LARGELY BY TELEPHONE...



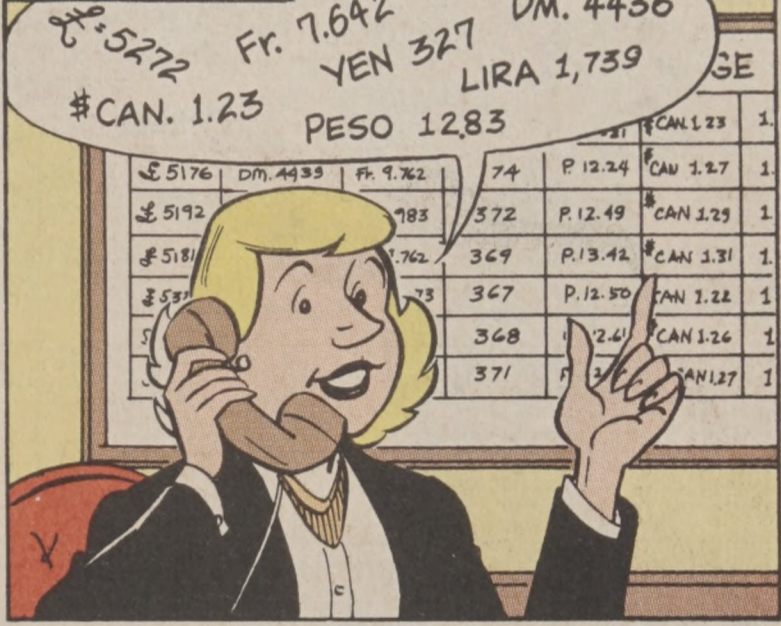
HEY! SON! WHERE CAN I EXCHANGE MY U.S. DOLLARS FOR FRANCS?



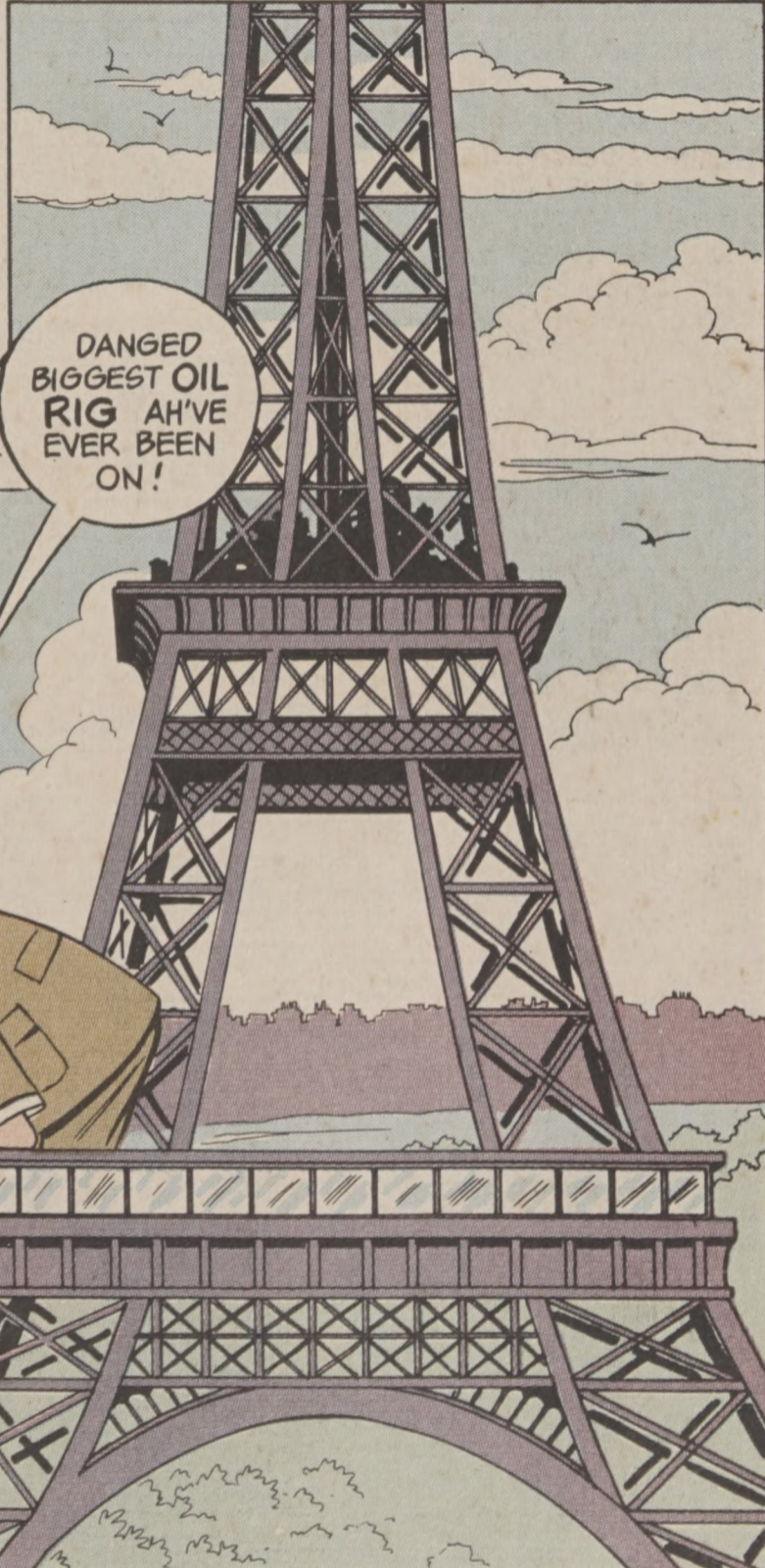
...BUT ALSO BY TELETYPE. THEY QUOTE BUYING AND SELLING PRICES-- THE FOREIGN EXCHANGE RATES OF FOREIGN MONIES DAILY.



THESE RATES EXPRESS THE PURCHASING POWER OF ONE NATION'S MONEY IN RELATION TO ANOTHER'S.



TEX HAS LEARNED THAT FRANCS TODAY ARE SELLING FOR 12 1/2 CENTS, OR EIGHT FOR A DOLLAR.



THE FOREIGN EXCHANGE MARKET NOT ONLY HELPS TOURISTS LIKE TEX, BUT IMPORTERS, EXPORTERS, AND INTERNATIONAL INVESTORS. MOST FOREIGN EXCHANGE TRANSACTIONS INVOLVE BANK BALANCES RATHER THAN CURRENCY.



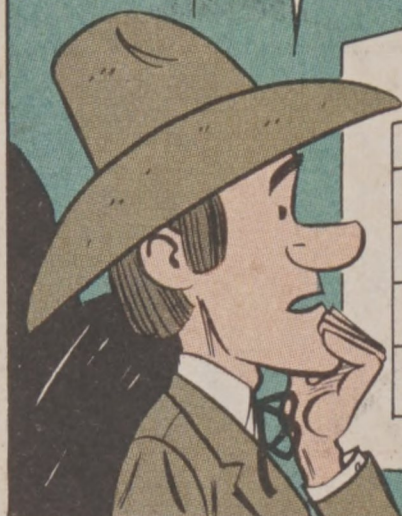
THE PRICES OF MOST FOREIGN MONIES, THEIR EXCHANGE RATES, CHANGE MINUTE BY MINUTE AND DAY BY DAY IN THE EXCHANGE MARKET, POSING STILL ANOTHER PROBLEM FOR PEOPLE WHO NEED FOREIGN MONIES.



FRANCS      DOLLARS

6	\$ 1.00
5½	\$ 1.00
8	\$ 1.00

THE WAY THESE RATES CHANGE, THE FOREIGN EXCHANGE BUSINESS IS RISKY. WHY DO RATES CHANGE?



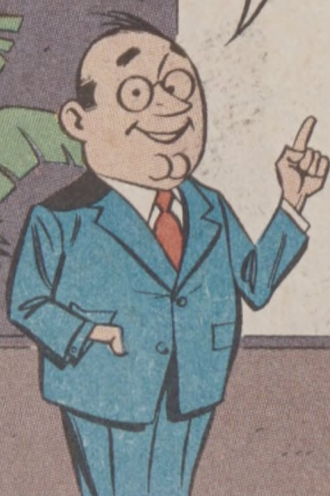
EXCHANGE RATE

DOLLARS	YEN	FRANCS
\$ 1.00	290	9.5
\$ 1.00	310	10.2
\$ 1.00	297	8.7
\$ 1.00	278	11.3

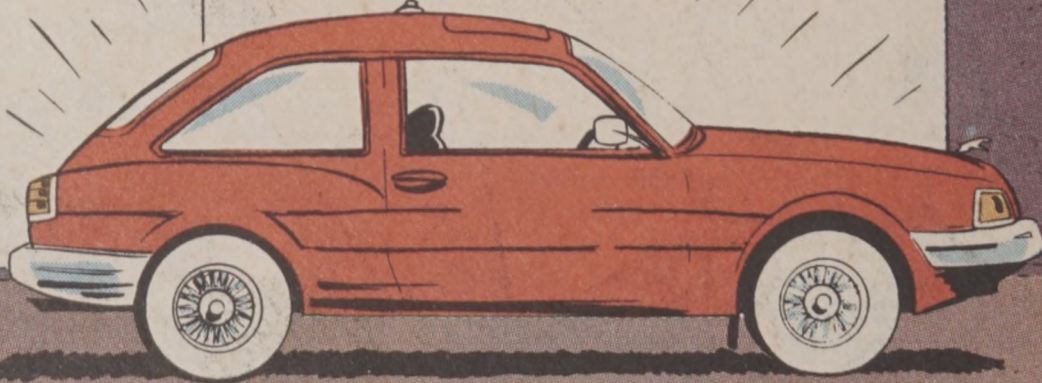
RATES CHANGE BECAUSE OF SHIFTS IN THE SUPPLY OF AND DEMAND FOR CURRENCIES. LOOK AT IT THIS WAY.

**SUPPLY**  
AND  
**DEMAND**

SUPPOSE AMERICANS WANT MORE BRITISH GOODS SUCH AS CARS OR WOOLENS. AMERICAN IMPORTERS WILL HAVE TO BUY BRITISH POUNDS WITH THEIR DOLLARS TO PAY FOR THESE PRODUCTS.



£ 10,000  
\$ 15,000





AS U.S. DEMAND FOR POUNDS INCREASES, THE POUND'S PRICE RISES. AS PEOPLE SELL MORE DOLLARS TO BUY POUNDS THE PRICE OF THE DOLLAR FALLS.

THE POUND EXCHANGE RATE RISES AND YOU COULD END UP PAYING MORE FOR, SAY, THAT BRITISH CAR.

£ 10,000  
~~\$ 15,000~~  
 \$ 20,000

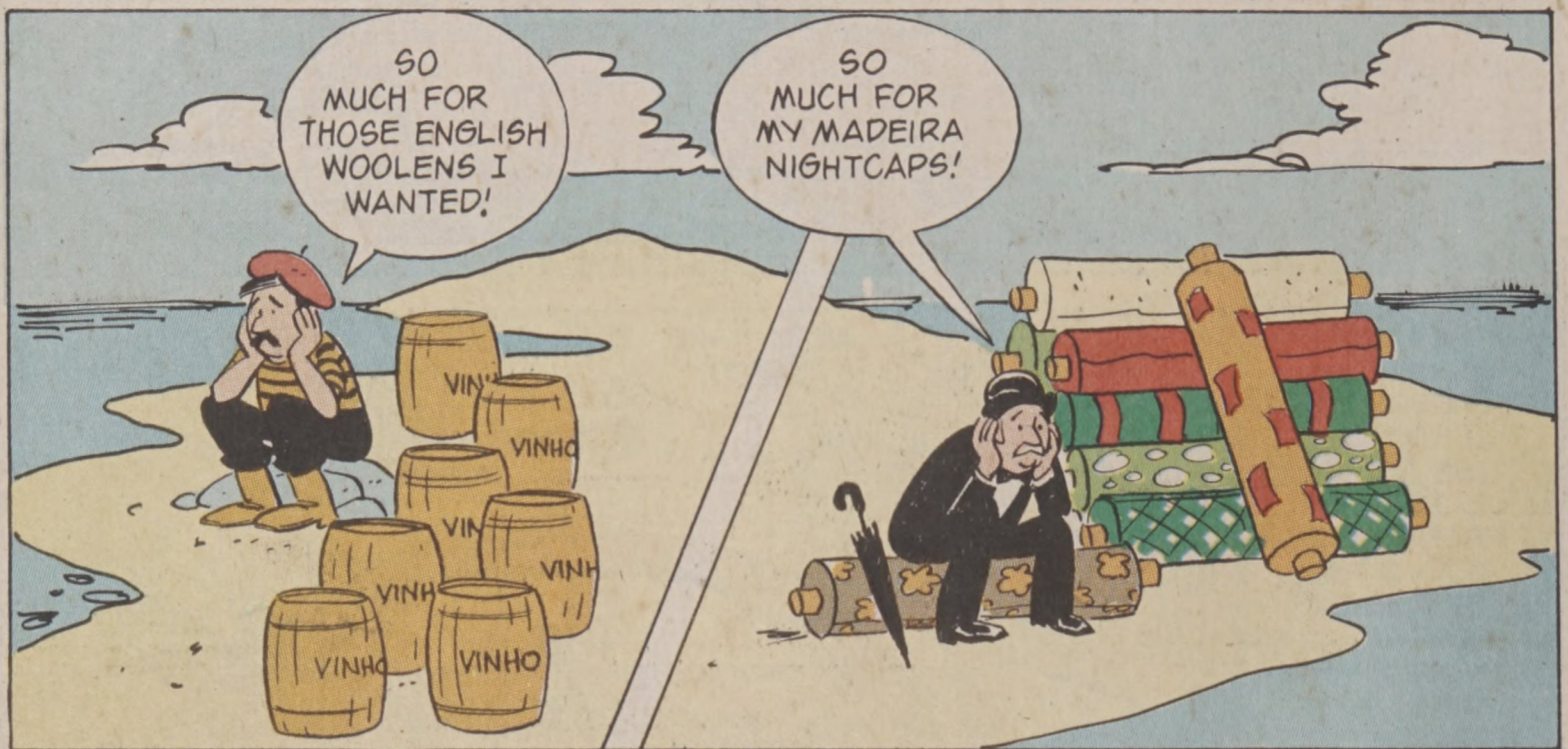
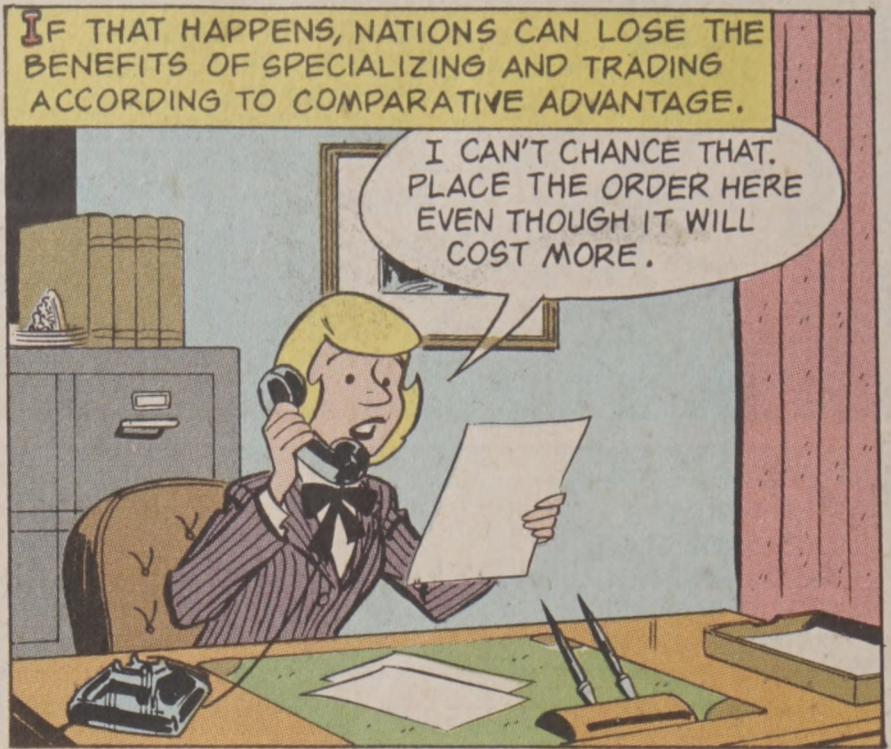
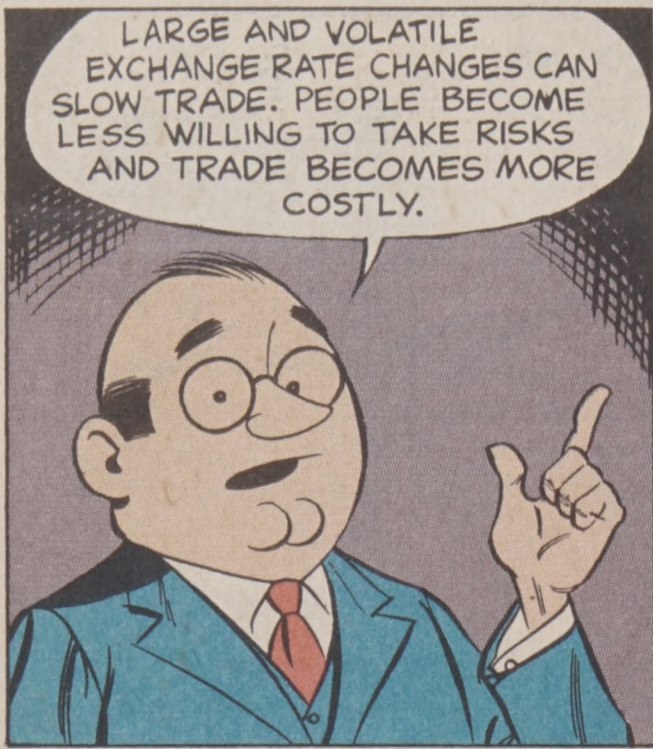
OF COURSE, UNDER OTHER CONDITIONS, THE EXCHANGE RATE FOR THE POUND COULD FALL. BRITISH EXPORTERS WOULD SELL MORE.

AH'LL TAKE TWO!

£ 10,000  
 \$ 7,000

BUT A LOWER VALUE FOR THE POUND WOULD FORCE BRITISH IMPORTERS TO PAY MORE FOR THE GOODS THEY BUY OVERSEAS.





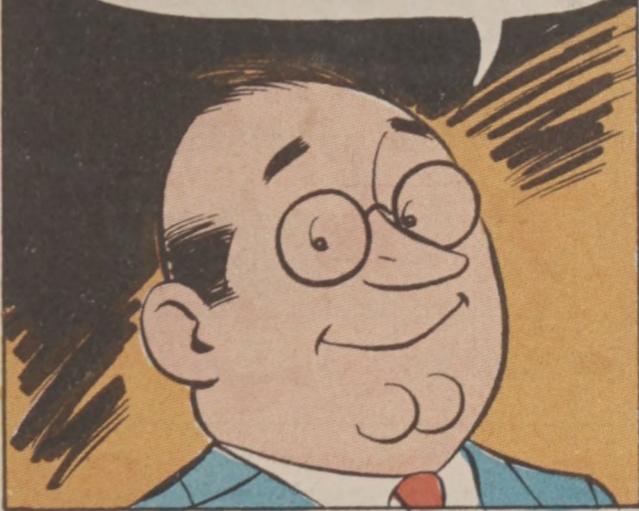
THE FOREIGN EXCHANGE MARKET COULDN'T COPE WITH WIDELY FLUCTUATING EXCHANGE RATES WITHOUT THE FORWARD CONTRACT.

DOLLARS	MARKS	FRANCS	POUNDS	PESOS	YEN
\$ 1.00	3.01	11.32	2.37	172	321
\$ 1.00	3.27	11.14	2.50	180	307
\$ 1.00	2.92	12.10	2.13	160	319
\$ 1.00	3.02	9.2	2.20	160	301
\$ 1.00	3.02	9.2	2.31	163	298
\$ 1.00	2.96	11.14	2.42	172	342
\$ 1.00	2.03	11.14	2.42	172	305
\$ 1.00	2.03	11.14	2.42	172	296
\$ 1.00	2.03	11.14	2.42	172	337
\$ 1.00	2.03	11.14	2.42	172	310
\$ 1.00	2.03	11.14	2.42	172	286
\$ 1.00	2.03	11.14	2.42	172	291

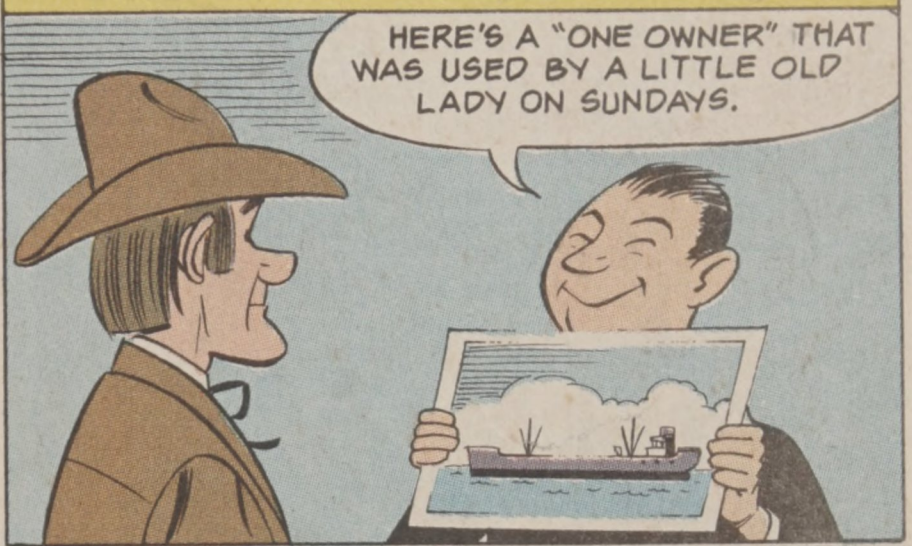




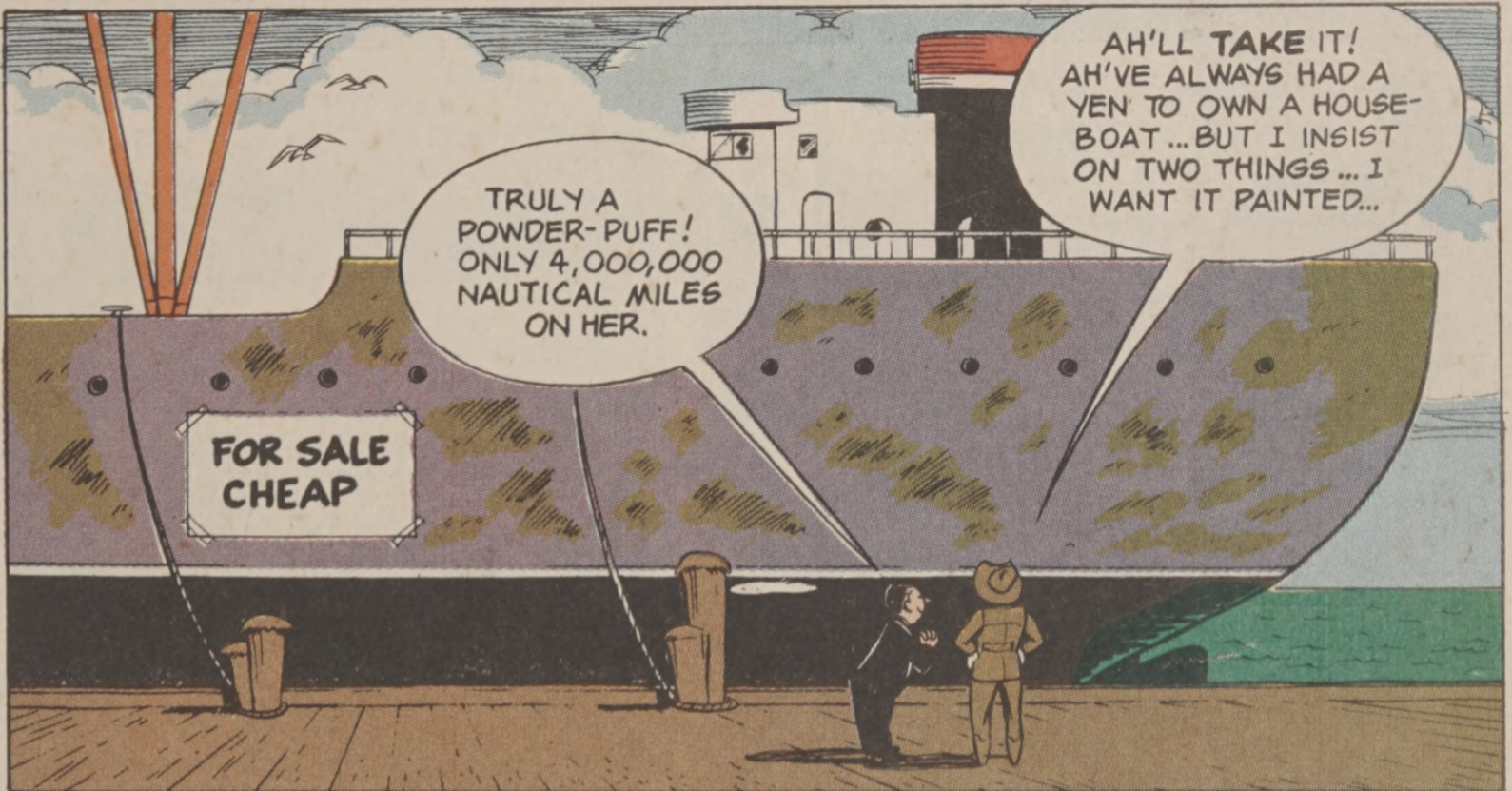
TODAY HE'S IN JAPAN WHERE HE WANTS TO BUY A SMALL USED SUPERTANKER TO CONVERT INTO A HOUSEBOAT.



THE TANKER COSTS 600 MILLION YEN. SUPPOSE THE EXCHANGE RATE IS 300 YEN TO THE DOLLAR. THAT MEANS TEX WOULD HAVE TO PAY \$2 MILLION.



HERE'S A "ONE OWNER" THAT WAS USED BY A LITTLE OLD LADY ON SUNDAYS.



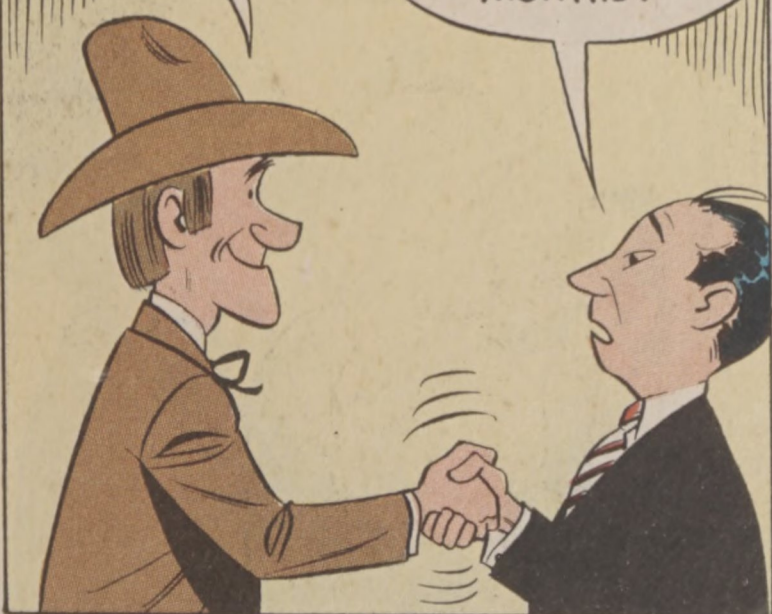
TRULY A POWDER-PUFF! ONLY 4,000,000 NAUTICAL MILES ON HER.

AH'LL TAKE IT! AH'VE ALWAYS HAD A YEN TO OWN A HOUSE-BOAT ... BUT I INSIST ON TWO THINGS ... I WANT IT PAINTED...

FOR SALE CHEAP

... AND YOU'LL HAVE TO DELIVER IT! OKAY?

ALL THE WAY TO TEXAS? ... OKAY ... BUT THAT WILL TAKE THREE MONTHS!

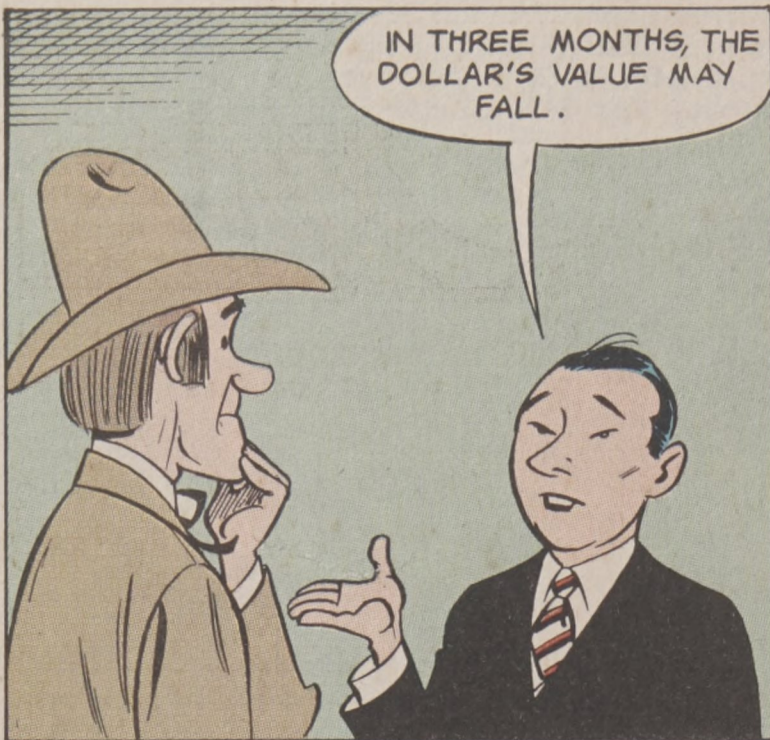


AH'LL PAY YOU IN THREE MONTHS WHEN THE BOAT'S DELIVERED. I S'POSE YOU'LL ACCEPT DOLLARS?

YES - BUT I HAVE A PROBLEM.







AT 300 YEN TO THE DOLLAR RIGHT NOW, 600 MILLION YEN EQUALS \$2 MILLION, THE AGREED UPON PRICE IN DOLLARS.

**EXCHANGE RATE**

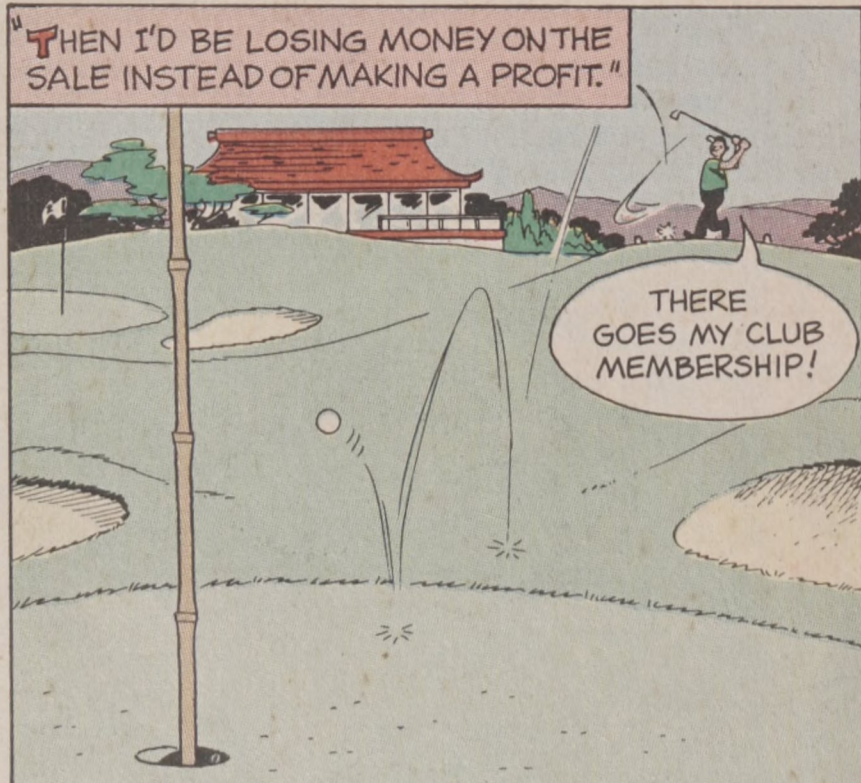
YEN	DOLLARS
600,000,000	2,000,000



THEN I WILL GET ONLY 500 MILLION YEN FOR THE \$2 MILLION, 100 MILLION YEN LESS THAN I WOULD GET TODAY."

**EXCHANGE RATE**

YEN	DOLLARS
500,000,000	2,000,000

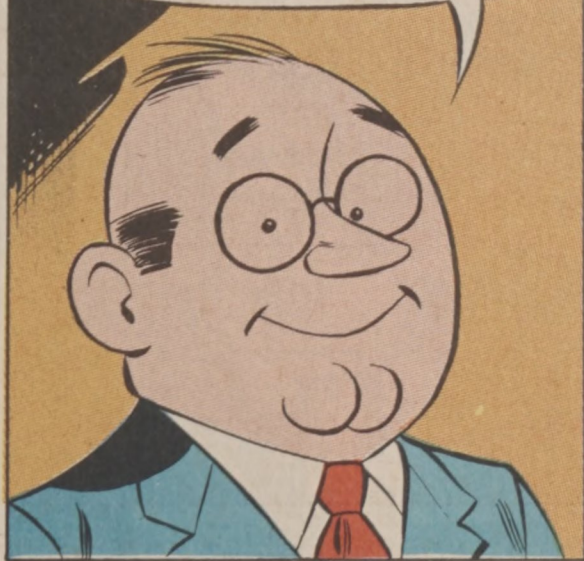


THEN I'D BE LOSING MONEY ON THE SALE INSTEAD OF MAKING A PROFIT."



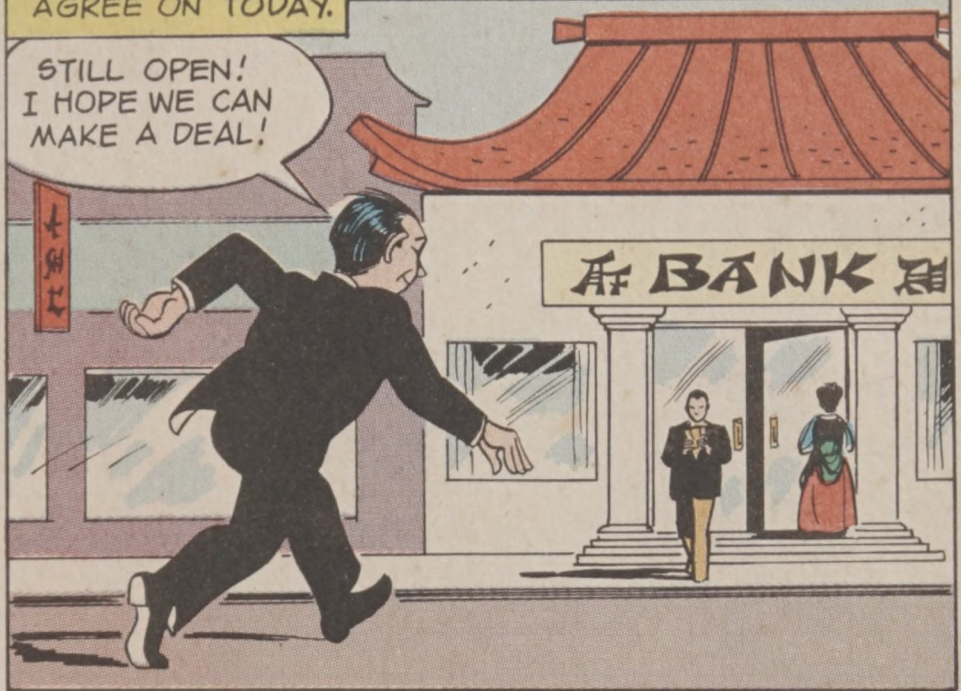


OUR JAPANESE BUSINESS-  
MAN KNOWS HE CAN COVER  
THIS RISK WITH A FORWARD  
FOREIGN EXCHANGE CONTRACT.  
HERE'S WHAT HE WOULD DO.

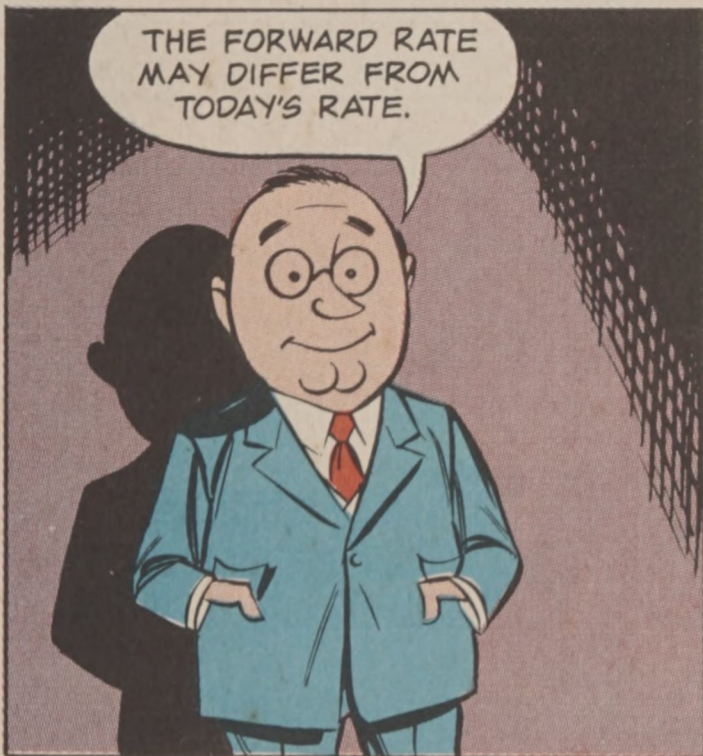


HE WOULD SELL THE DOLLARS HE WILL GET IN THREE  
MONTHS, SELLING THEM AT A PRICE HE AND HIS BANKER  
AGREE ON TODAY.

STILL OPEN!  
I HOPE WE CAN  
MAKE A DEAL!



THE FORWARD RATE  
MAY DIFFER FROM  
TODAY'S RATE.

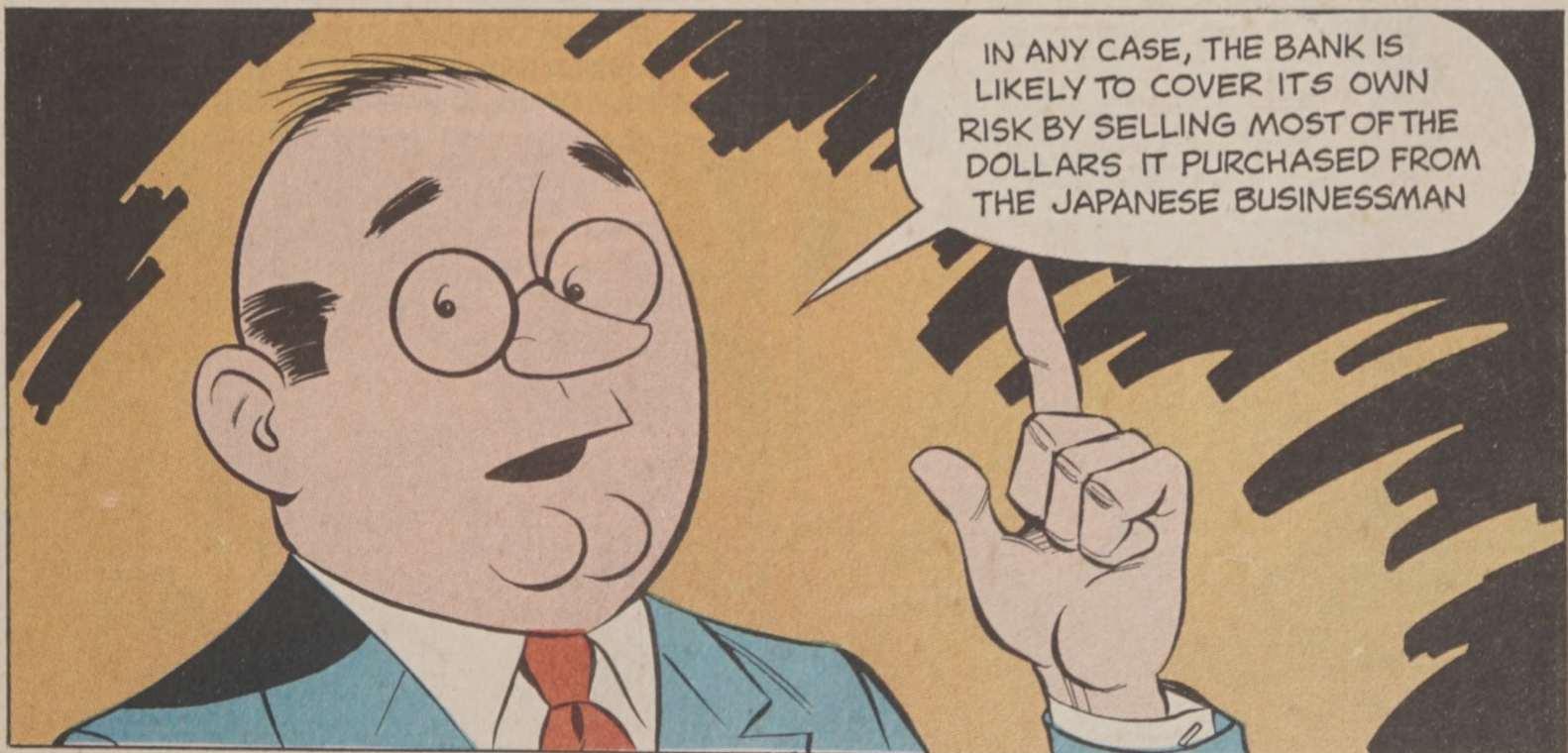


IT MAY BE HIGHER OR LOWER DEPENDING  
ON THE DIFFERENCE BETWEEN U.S. INTEREST  
RATES AND THOSE IN  
OTHER COUNTRIES.

AND  
HERE'S YOUR  
CONTRACT.



IN ANY CASE, THE BANK IS  
LIKELY TO COVER ITS OWN  
RISK BY SELLING MOST OF THE  
DOLLARS IT PURCHASED FROM  
THE JAPANESE BUSINESSMAN





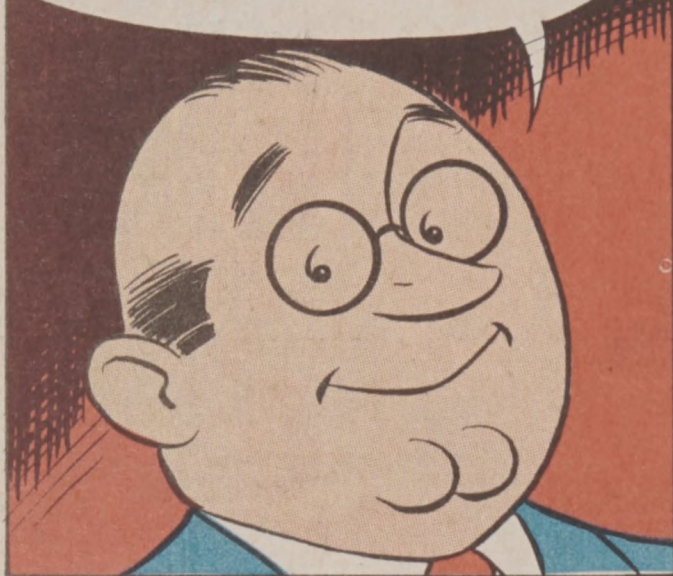
**I**T COULD SELL THE DOLLARS FORWARD TO A JAPANESE HAMBURGER KING, WHO IS IMPORTING TEXAS BEEF THAT HE'LL HAVE TO PAY FOR IN THREE MONTHS.



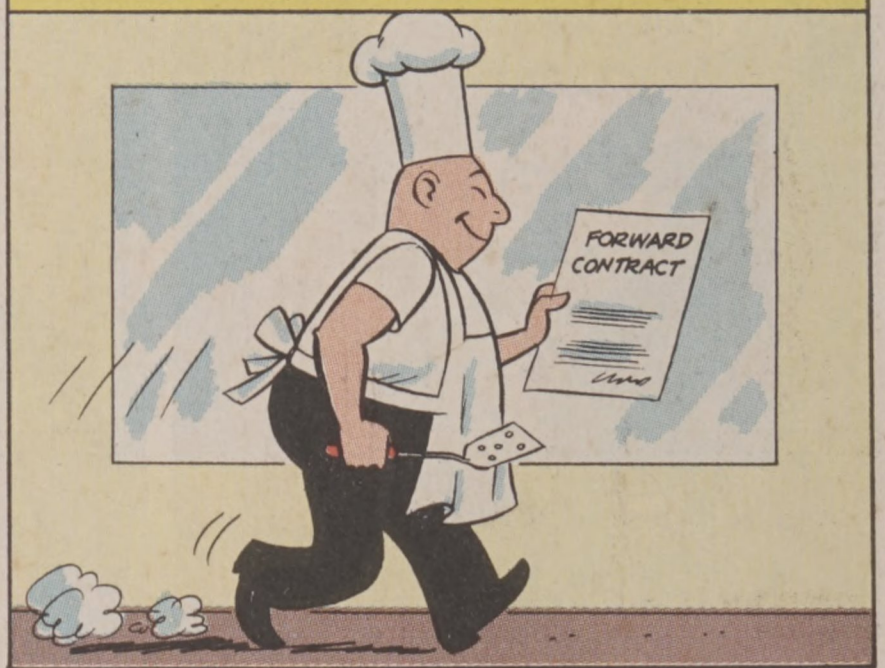
AND HERE'S A CONTRACT FOR YOUR DOLLARS WHICH ARE DUE IN THREE MONTHS.

VERY GOOD—HAMBURGER-MAKERS NEED PROTECTION TOO!

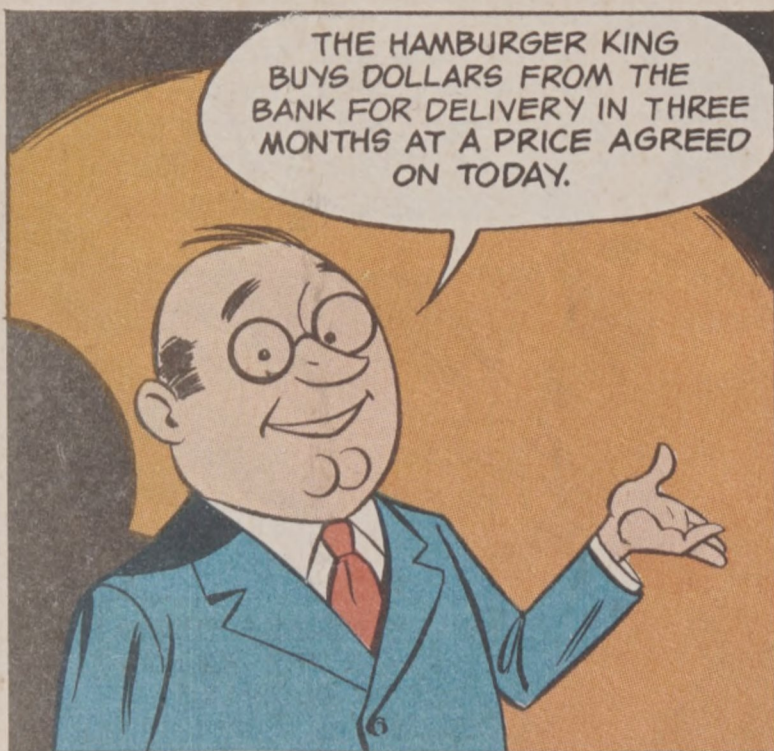
THE HAMBURGER KING IS PROTECTING HIMSELF TO MAKE SURE HE DOESN'T HAVE TO SPEND MORE YEN FOR EACH DOLLAR THAN HE PLANNED.



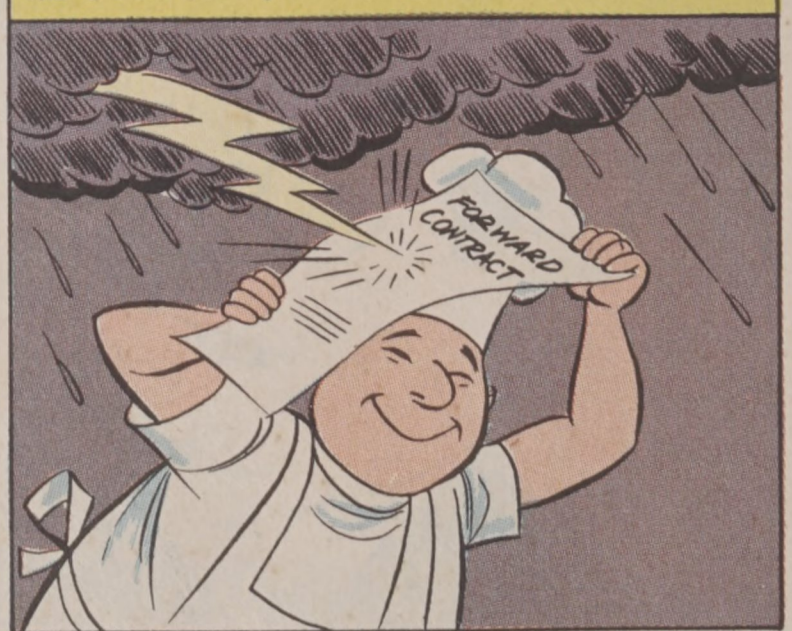
**B**Y TAKING OUT A FORWARD PURCHASE CONTRACT HE PROTECTS HIMSELF FOR A FEE.



THE HAMBURGER KING BUYS DOLLARS FROM THE BANK FOR DELIVERY IN THREE MONTHS AT A PRICE AGREED ON TODAY.



**E**VEN IF THE DOLLAR EXCHANGE RATE RISES, THE HAMBURGER KING IS COVERED BECAUSE HIS DOLLARS HAVE ALREADY BEEN BOUGHT.



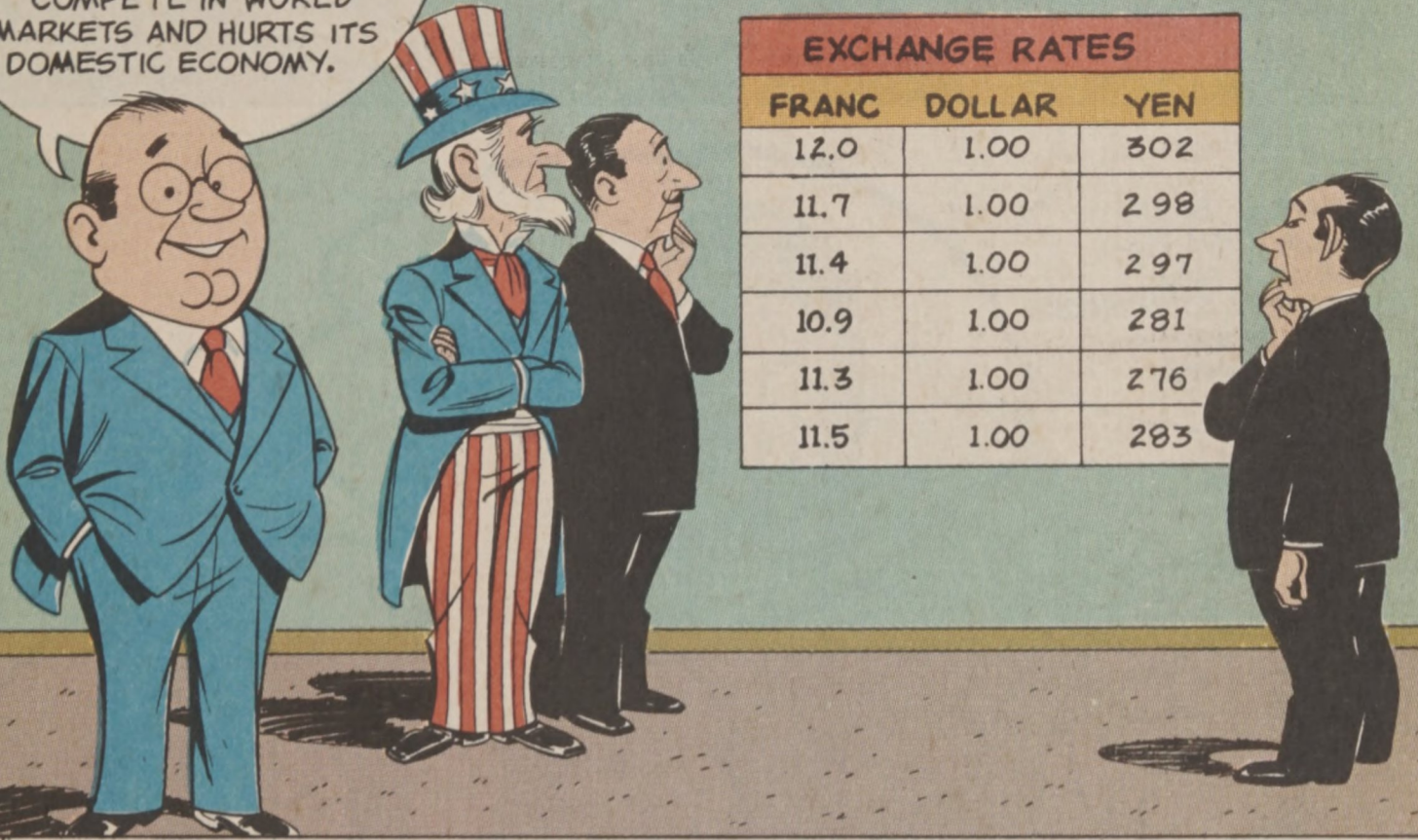


PEOPLE LIKE TEX, AND TRADERS LIKE THE JAPANESE HAMBURGER KING, AREN'T THE ONLY ONES WHO CARE ABOUT EXCHANGE RATES.

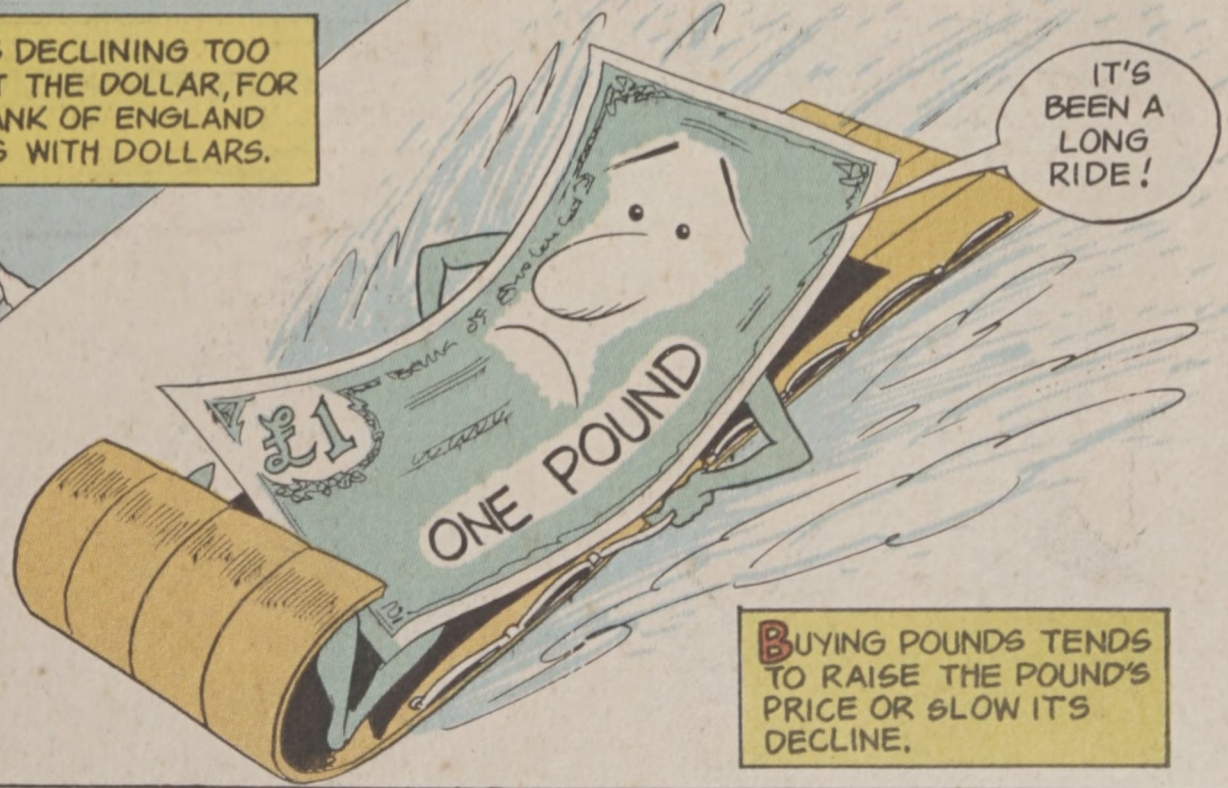


GOVERNMENTS CARE, TOO. ERRATIC EXCHANGE RATE MOVEMENTS CAN WEAKEN THE CONFIDENCE OF TRADERS AND INVESTORS. THIS AFFECTS A COUNTRY'S ABILITY TO COMPETE IN WORLD MARKETS AND HURTS ITS DOMESTIC ECONOMY.

EXCHANGE RATES		
FRANC	DOLLAR	YEN
12.0	1.00	302
11.7	1.00	298
11.4	1.00	297
10.9	1.00	281
11.3	1.00	276
11.5	1.00	283



IF THE POUND IS DECLINING TOO RAPIDLY AGAINST THE DOLLAR, FOR EXAMPLE, THE BANK OF ENGLAND MAY BUY POUNDS WITH DOLLARS.



IT'S BEEN A LONG RIDE!

BUYING POUNDS TENDS TO RAISE THE POUND'S PRICE OR SLOW ITS DECLINE.

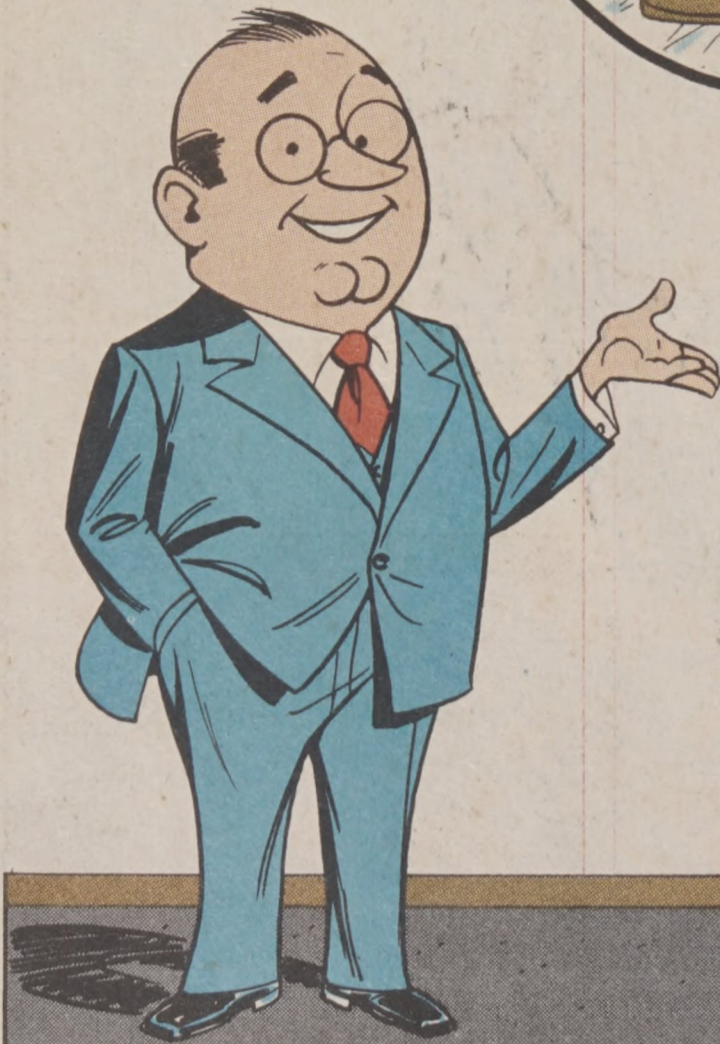
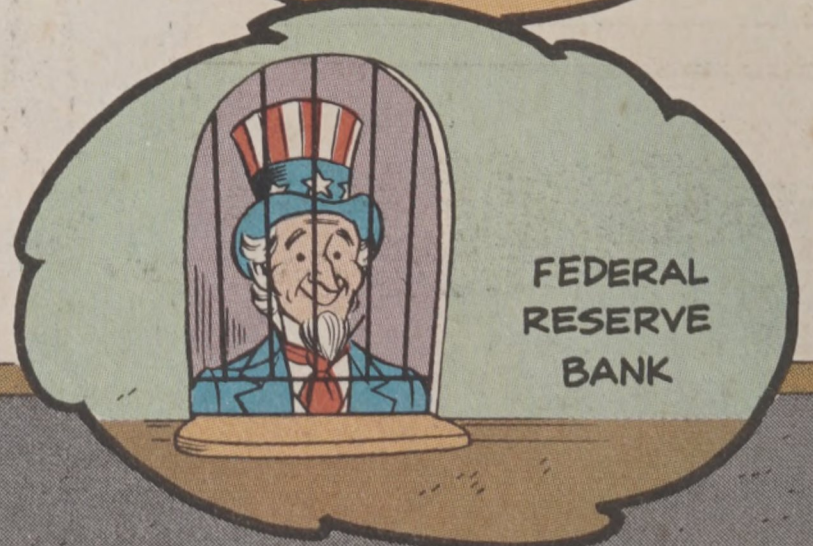


OR IF THE GERMAN MARK IS RISING EXTREMELY RAPIDLY AGAINST THE DOLLAR, THE GERMAN CENTRAL BANK MAY SELL MARKS FOR DOLLARS. SELLING MARKS TENDS TO LOWER THE MARK'S PRICE OR SLOW ITS ASCENT.

STILL CAN'T SEE THE SUMMIT!



CENTRAL BANKS FROM TIME TO TIME BUY AND SELL THEIR CURRENCIES WITH FOREIGN EXCHANGE.





ONE BROAD GOAL OF THIS OCCASIONAL INTERVENTION IS TO ENSURE THAT FOREIGN EXCHANGE MARKETS DO NOT BECOME DISORDERLY. THEN, AS NATIONS AND AS INDIVIDUALS WE CAN ENJOY EXPANDING PRODUCTION AND CONSUMPTION THAT COMES FROM TRADE AND HAVING MONEY TO TRADE.



*Al Hayes*



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Public Information Department  
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