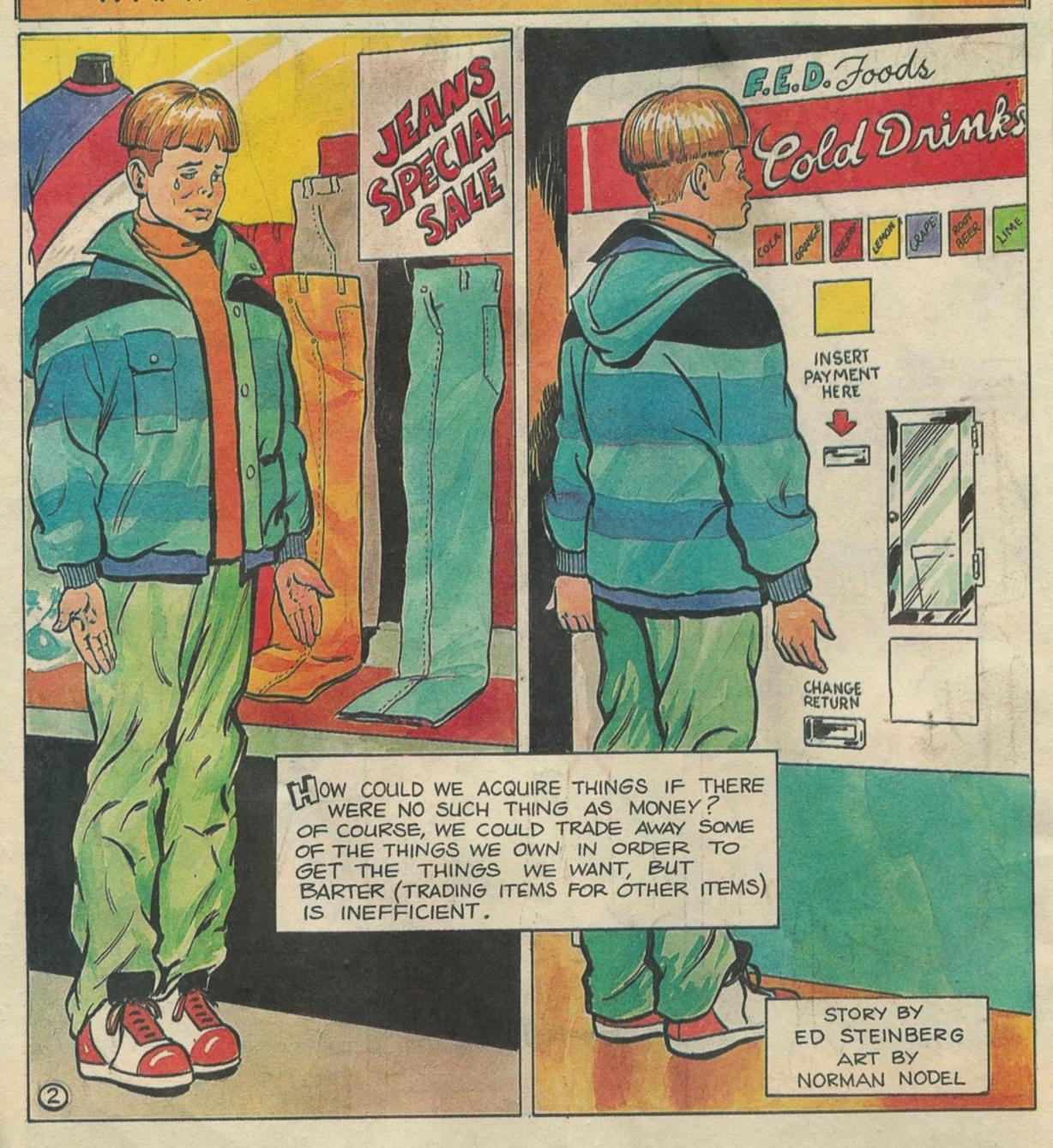


THE STORY OF A SOLUTION OF A S

WHAT IF THERE WERE NO MONEY?



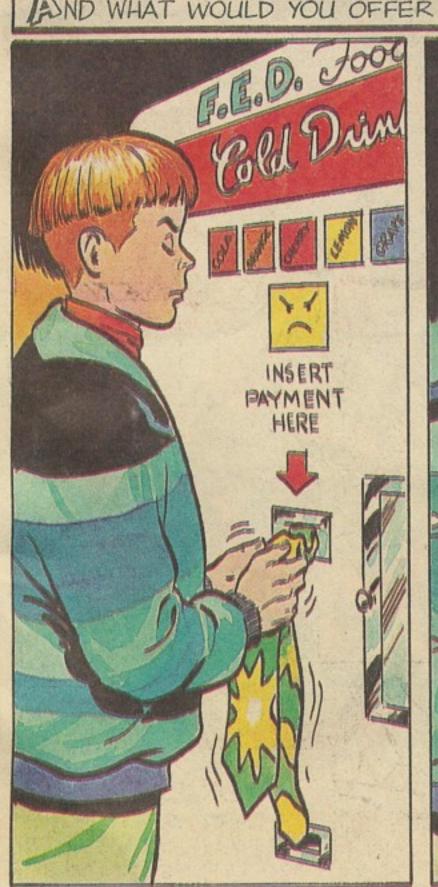
WHAT IF THE JEANS SELLER DIDN'T WANT ANY OF THE THINGS YOU HAD TO TRADE?



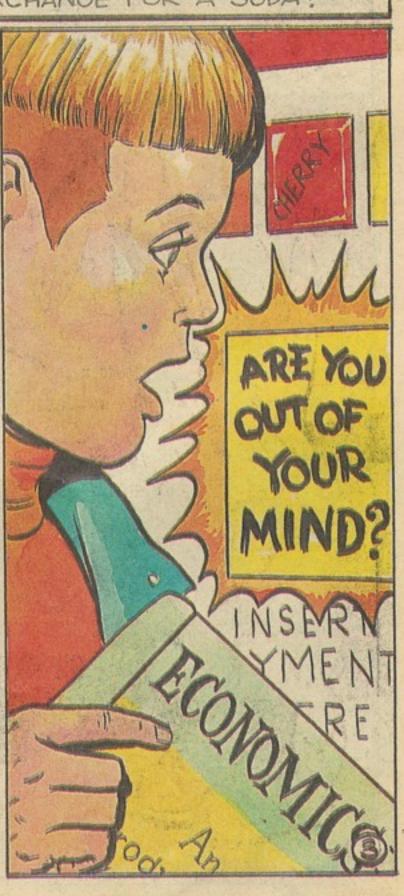




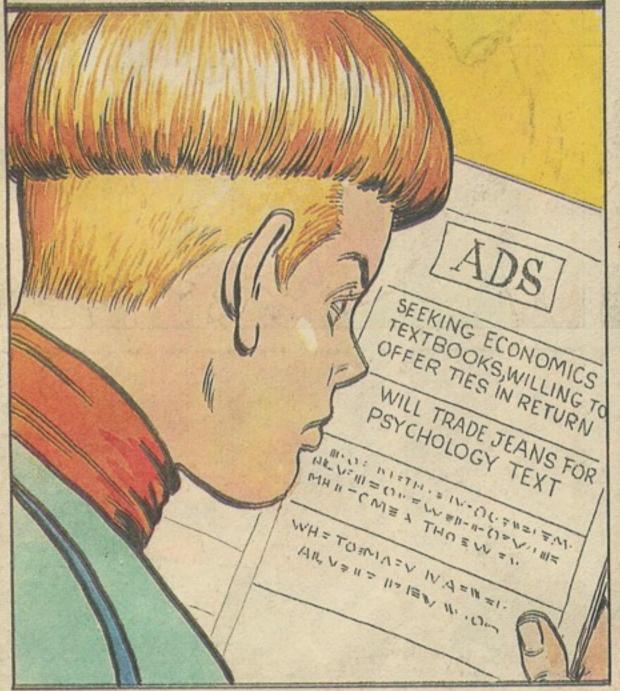
AND WHAT WOULD YOU OFFER THE VENDING MACHINE IN EXCHANGE FOR A SODA?







BARTER REQUIRES A "COINCIDENCE OF WANTS."
THUS, FOR BARTER TO TAKE PLACE, A
PERSON WANTING TO TRADE, LET'S SAY,
A TEXTBOOK FOR A PAIR OF JEANS,
MUST FIND SOMEONE WILLING TO
PART WITH THE JEANS IN EXCHANGE
FOR A TEXTBOOK.

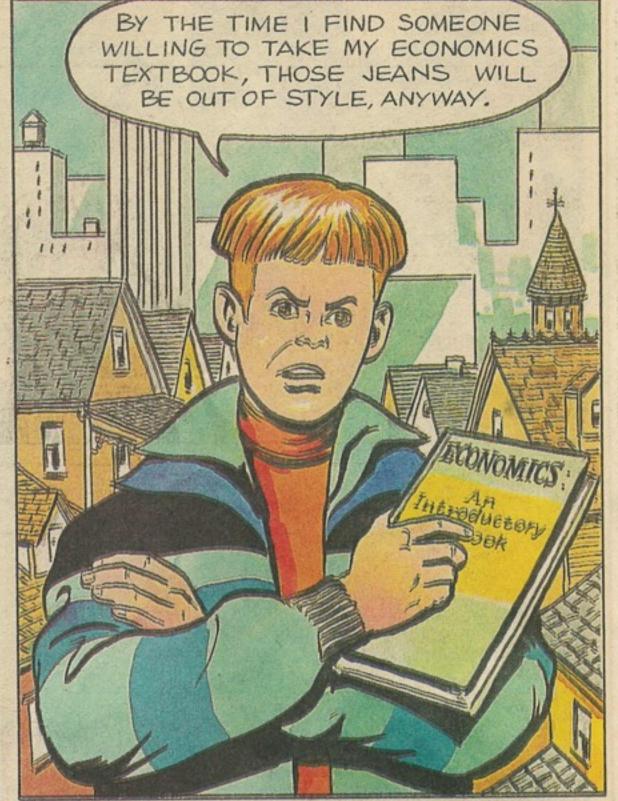


THAT'S RIGHT; IT MIGHT TAKE YEARS TO FIND SOMEONE WHO WANTED THE

ITEM YOU WANTED TO TRADE AWAY.



FINDING A BARTER PARTNER MIGHT REQUIRE A LONG SEARCH.



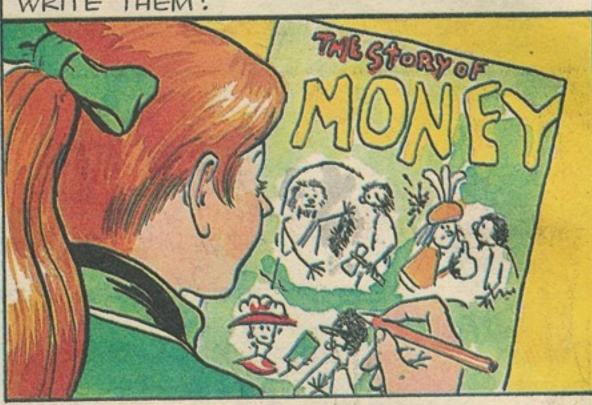
SO, BARTER IS TIME-CONSUMING; IN FACT, IT'S PROHIBITIVELY TIME-CONSUMING. SO IF THERE WERE NO MONEY, PEOPLE WOULD BE FORCED TO BE MUCH MORE SELF-SUFFICIENT THAN THEY ARE NOW-- THAT IS, THEY WOULD TRY TO PRODUCE MANY OF THE THINGS THEY WANT, INSTEAD OF ACQUIRING THEM FROM OTHER PEOPLE. PEOPLE IN COLD CLIMATES, FOR EXAMPLE, MIGHT TRY TO GROW THEIR OWN BANANAS.



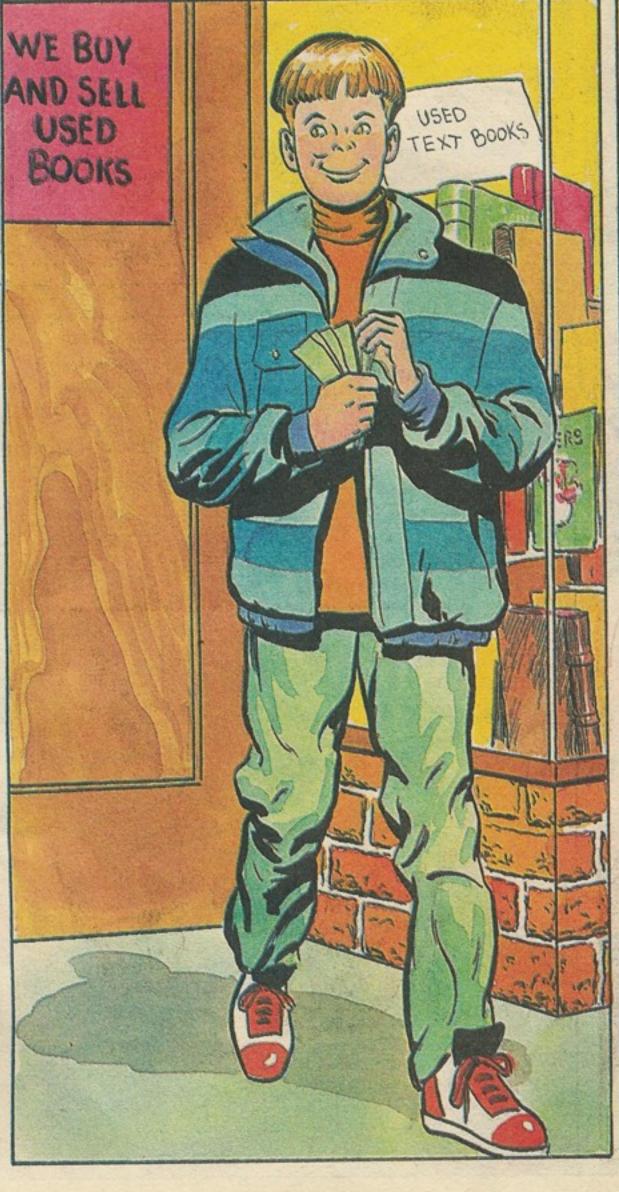
THEIR OWN DAIRY PRODUCTS. YOU'D HAVE PEOPLE TRYING TO MILK COWS WHO DON'T KNOW ONE END OF THE ANIMAL FROM THE UDDER.



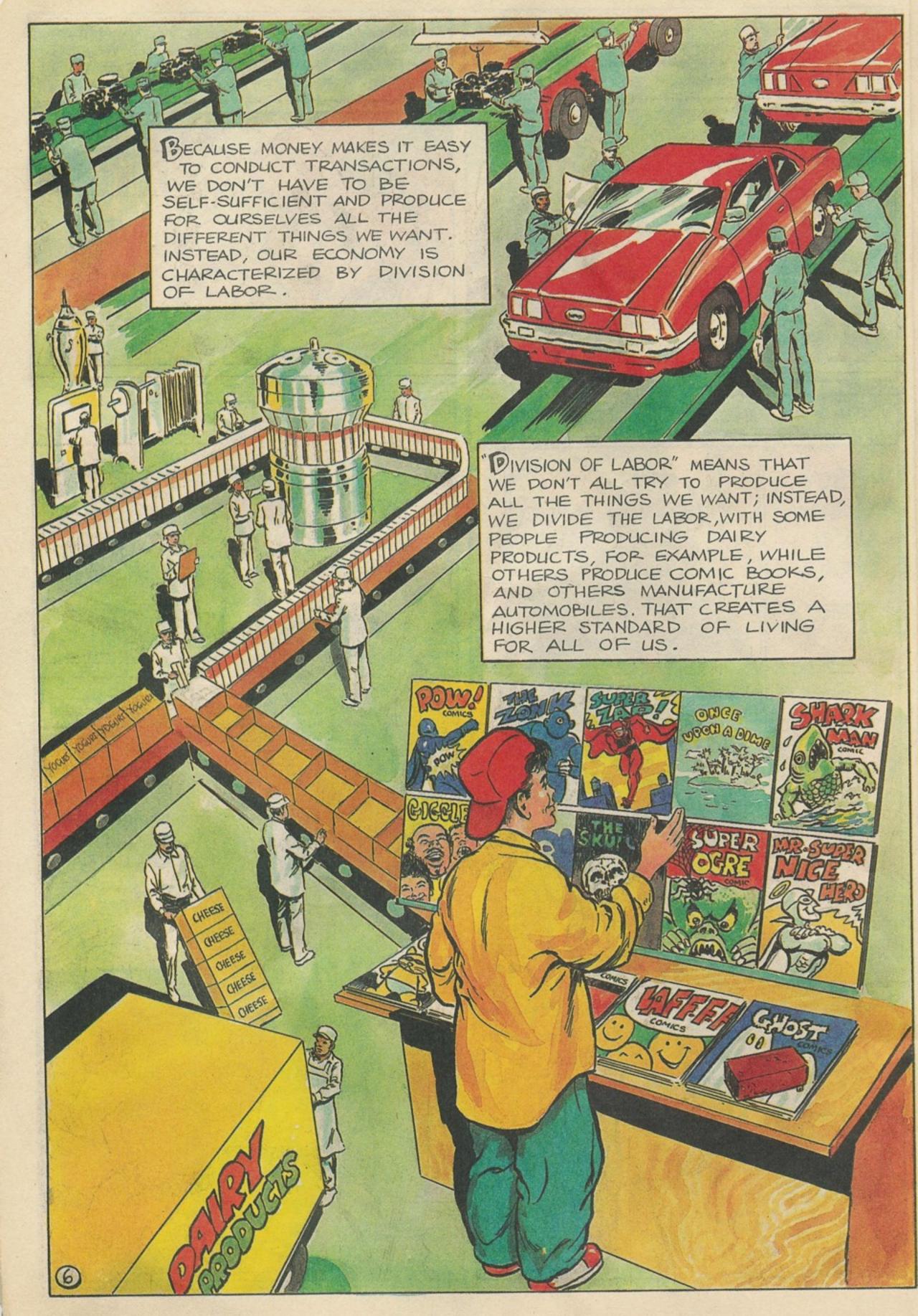
AND, CAN YOU IMAGINE HOW POOR THE QUALITY WOULD BE IF PEOPLE TRIED TO PRODUCE THEIR OWN COMIC BOOKS, INSTEAD OF LETTING THE EXPERTS WRITE THEM?







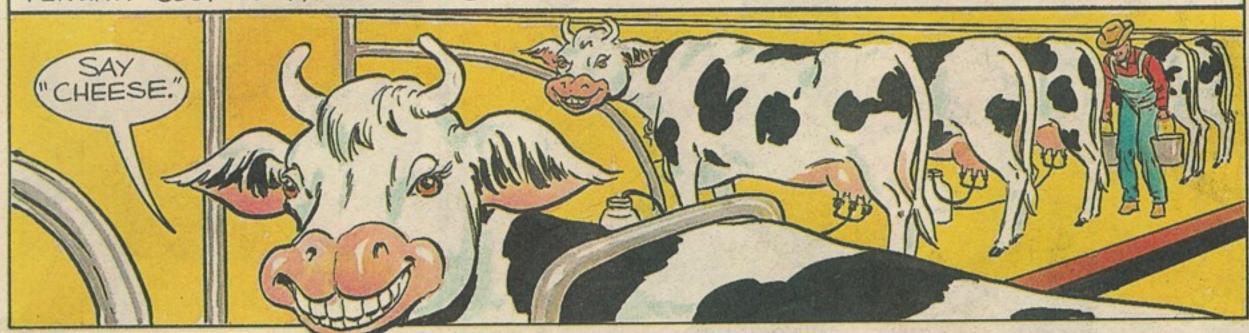




WHY DOES DIVISION OF LABOR LEAD TO A HIGHER STANDARD OF LIVING FOR OUR SOCIETY? THERE ARE AT LEAST TWO ANSWERS. FIRST, BY SPECIALIZING IN CERTAIN TASKS, RATHER THAN TRYING TO PRODUCE EVERYTHING, PEOPLE BECOME MORE ADEPT AT THOSE TASKS AND, THEREFORE, MORE PRODUCTIVE.

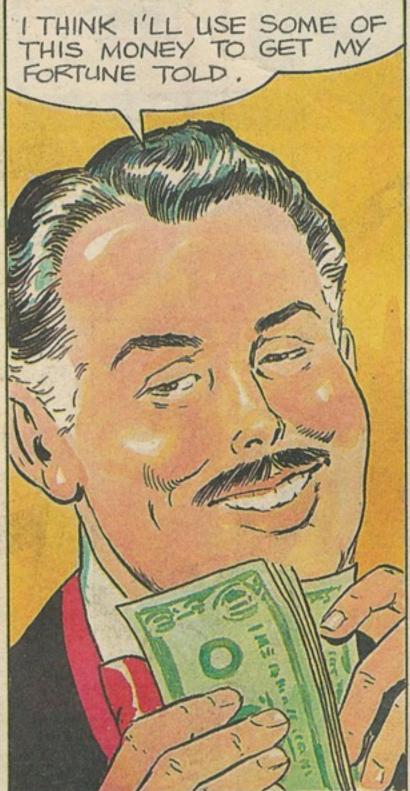


SECOND, ECONOMIES OF SCALE DEVELOP, AS THE USE OF SPECIALIZED MACHINERY MAKES PRODUCTION EVEN MORE EFFICIENT. WITH ECONOMIES OF SCALE, THE PER-UNIT COST OF PRODUCTION GOES DOWN AS YOU PRODUCE MORE.



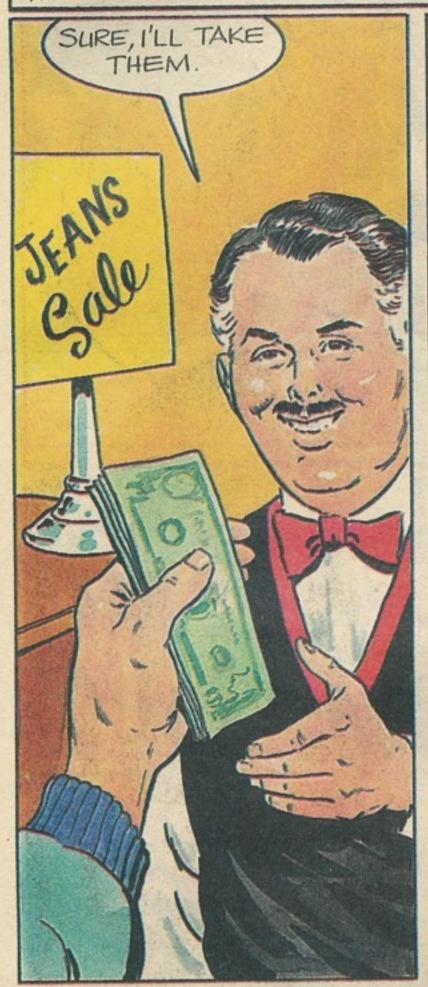
WE NOW UNDERSTAND ONE OF THE MAJOR USES OF MONEY IN SOCIETY. MONEY SERVES AS A MEDIUM OF EXCHANGE -- THAT IS, IT'S WHAT WE USE TO BUY THINGS WITH, AND TO SELL THINGS FOR.

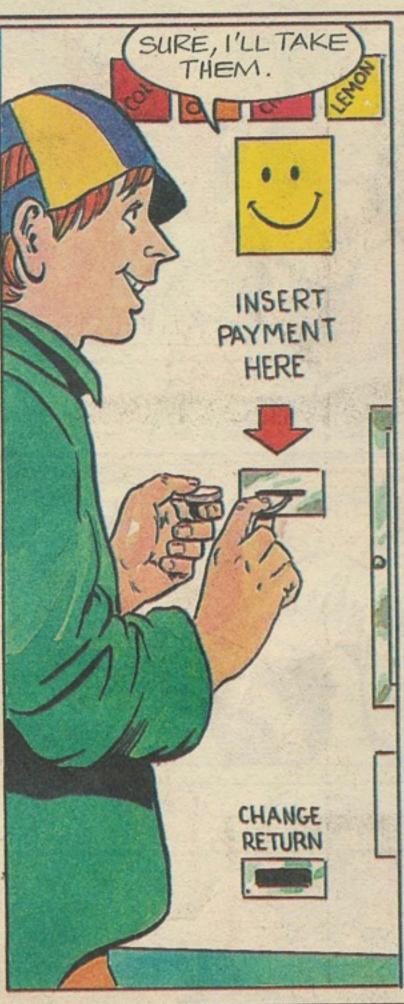






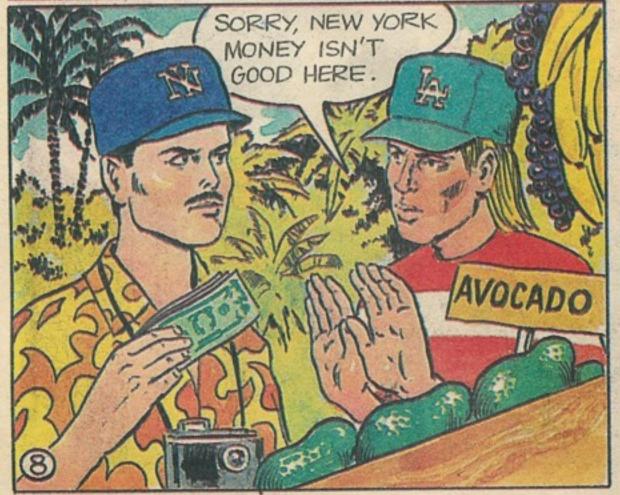
WHAT PROPERTIES MUST MONEY HAVE IN ORDER TO SERVE AS AN EFFECTIVE MEDILIM OF EXCHANGE? FIRST OF ALL, IT MUST BE ACCEPTABLE TO PEOPLE WHO WANT TO SELL THINGS. SELLERS MUST BE CONFIDENT THAT THE MONEY THEY ACCEPT FROM YOU WILL BE ACCEPTABLE TO THE PEOPLE FROM WHOM THEY, IN TURN, WANT TO BUY THINGS.







WHAT IF THE SAME MONEY WERE NOT ACCEPTABLE EVERYWHERE IN THE COUNTRY? SUPPOSE THAT THE MONEY THAT CIRCULATED IN NEW YORK WERE NOT ACCEPTABLE TO CALIFORNIANS, AND THE MONEY THAT CIRCULATED IN CALIFORNIA WERE NOT ACCEPTABLE TO NEW YORKERS. NEW YORKERS WOULD HAVE TROUBLE BUYING ITEMS FROM CALIFORNIA, CALIFORNIANS WOULD HAVE TROUBLE BUYING THINGS FROM NEW YORK, AND RESIDENTS OF BOTH STATES WOULD HAVE A LOWER STANDARD OF LIVING.





NATION'S MONEY IS ACCEPTABLE THROUGHOUT ITS COUNTRY. BUT IF YOU WANT TO BUY THINGS IN ANOTHER COUNTRY, YOU HAVE TO USE THAT NATION'S MONEY. FOR EXAMPLE, IF AN ITALIAN OPERA SINGER GOES TO SEE A DOCTOR IN THE UNITED STATES, HE HAS TO PAY IN DOLLARS, NOT IN LIRA.



SIMILARLY, AN AMERICAN WHO WANTS TO BUY THINGS IN ENGLAND MUST USE POLINDS.





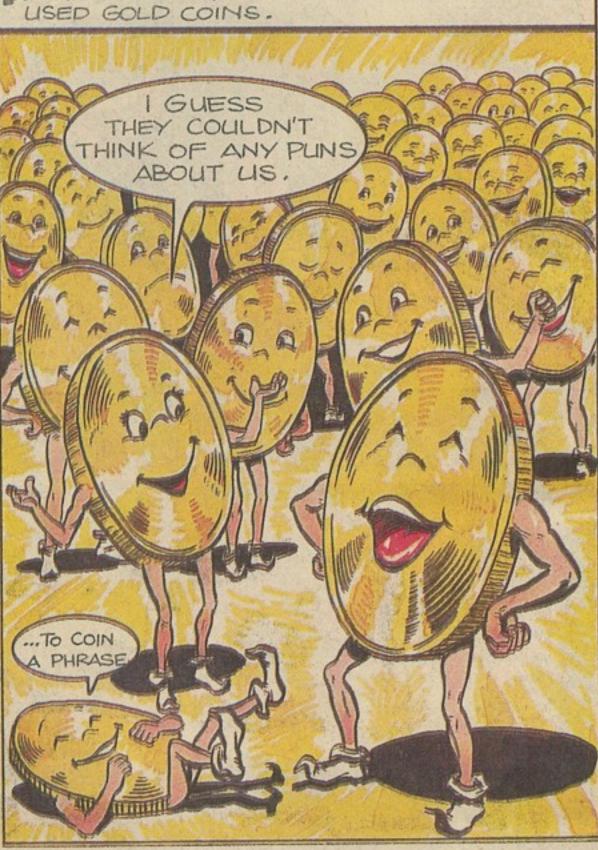
IN EARLIER TIMES, THOUGH, PEOPLE DID USE TYPES OF MONEY THAT HAD INTRINSIC VALUE. THE ANCIENT CHINESE USED CHISELS AS MONEY.

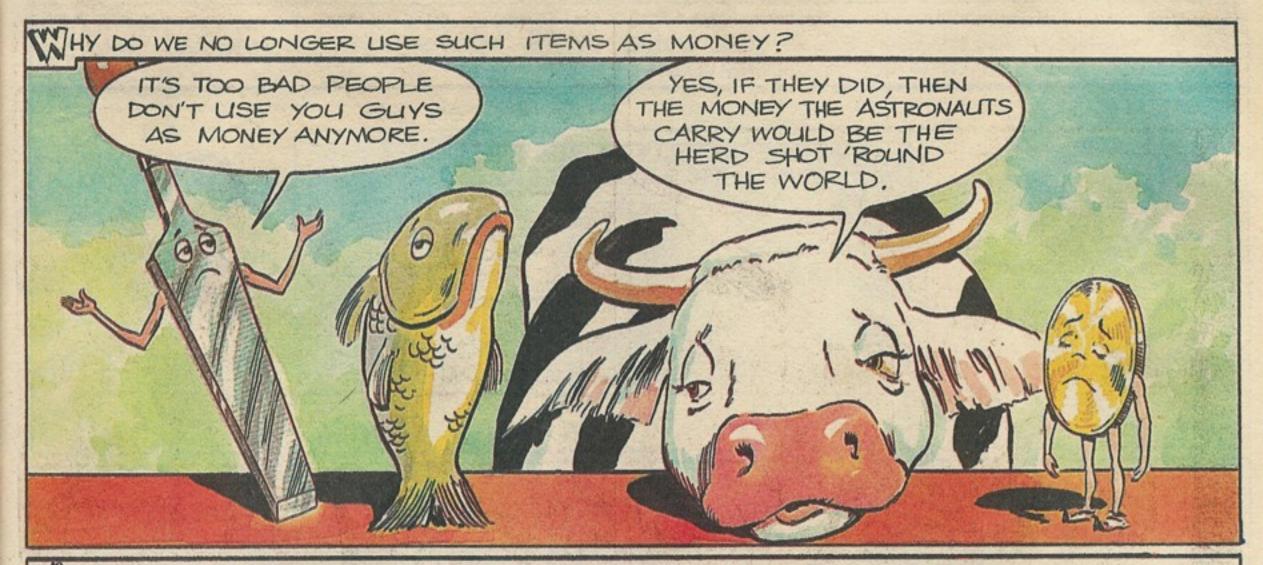




OTHER SOCIETIES HAVE USED FISH AS



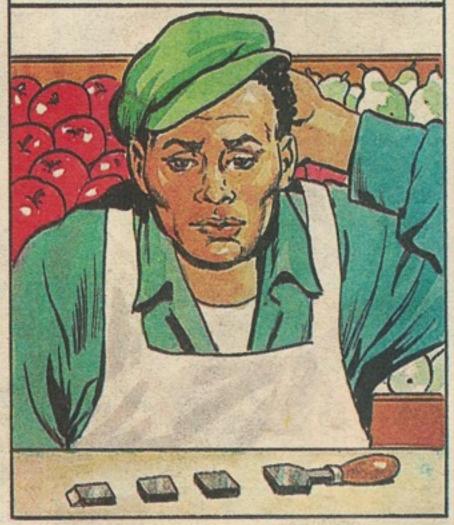


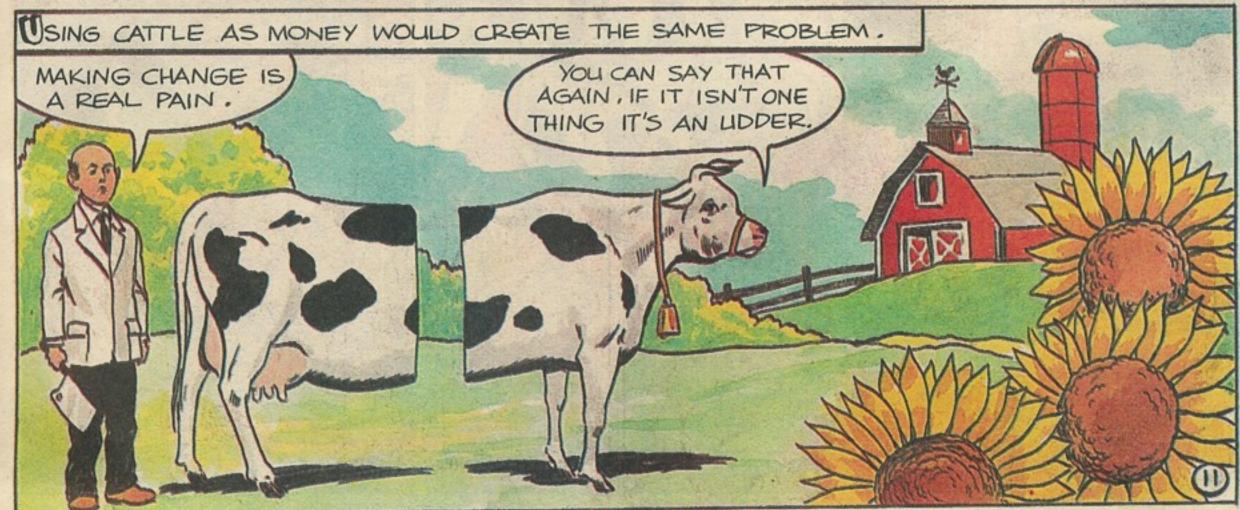


ANSWERING THAT QUESTION WILL HELP US UNDERSTAND SOME OF THE OTHER PROPERTIES THAT MONEY SHOULD HAVE IN ORDER TO SERVE AS AN EFFECTIVE MEDIUM OF EXCHANGE.



WELL, FIRST OF ALL, HOW WOULD YOU MAKE CHANGE IF SOMEONE BOUGHT LESS THAN A CHISEL'S WORTH OF WHATEVER YOU WERE SELLING?





DONEY MUST BE DIVISIBLE -- AS THE DOLLAR IS DIVISIBLE INTO HALF DOLLARS, QUARTERS, DIMES, NICKELS, AND PENNIES -- AND MANY OF THE ITEMS USED AS MONEY IN EARLIER ERAS WERE NOT DIVISIBLE.













MONEY MUST ALSO BE PORTABLE -- THAT IS, IT HAS TO BE SOMETHING THAT CAN BE MOVED AROUND, IN ORDER TO BUY THINGS, AND THE ITEMS WE'VE BEEN LOOKING AT ARE NOT VERY PORTABLE.







MONEY MUST ALSO BE FUNGIBLE. NO, THAT DOESN'T MEAN IT HAS TO BE ABLE TO GROW MOLD; IT MEANS THAT ONE UNIT OF MONEY MUST BE INTERCHANGEABLE FOR ANOTHER. CHISELS, FISH, AND CATTLE DON'T MEET THIS REQUIREMENT.







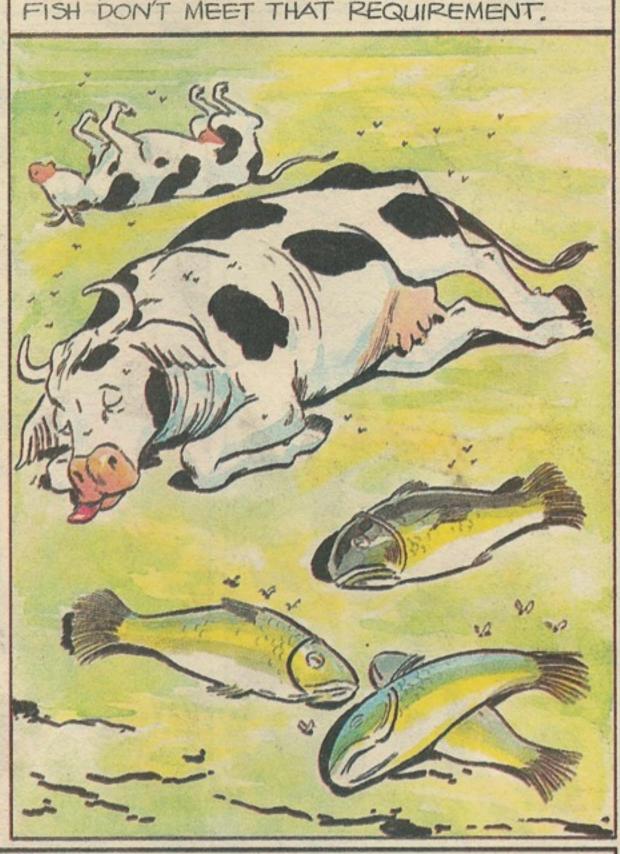
MONEY MUST BE FUNGIBLE BECAUSE, BESIDES SERVING AS A MEDIUM OF EXCHANGE, IT ALSO SERVES AS STANDARD OF VALUE-THAT IS, AS A UNIT IN WHICH WE CAN MEASURE THE PRICES OR VALUES OF MANY DIFFERENT THINGS.



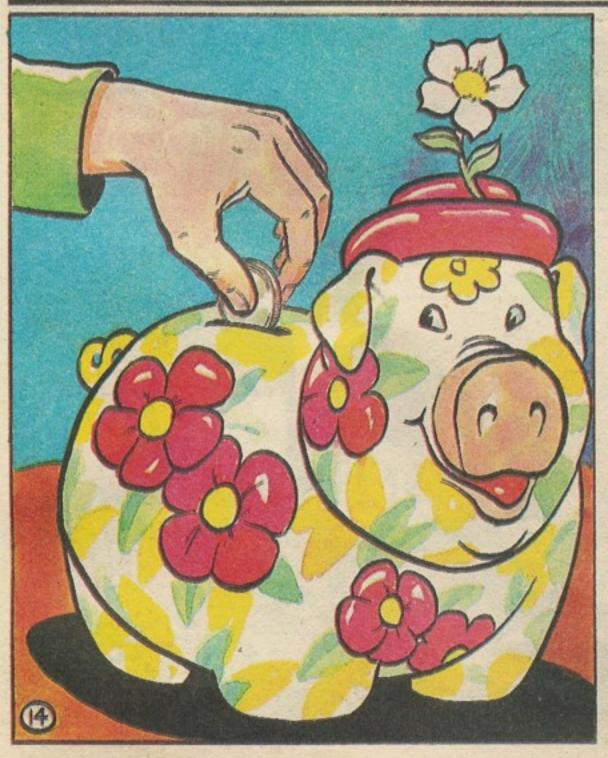
THE MONEY THAT WE USE IS FUNGIBLE. ANY DOLLAR IS WORTH THE SAME AS ANY OTHER DOLLAR, OLD AND WORN BILLS AND COINS ARE WORTH PRECISELY THE SAME AMOUNT AS CRISP AND SHINY NEW ONES.



MONEY MUST ALSO BE RELATIVELY STABLE IN VALUE, AND ITEMS SUCH AS CATTLE AND FISH DON'T MEET THAT REQUIREMENT.



WHY MUST MONEY BE RELATIVELY STABLE IN VALUE? ONE ANSWER IS THAT IN ADDITION TO SERVING AS A MEDIUM OF EXCHANGE AND AS A STANDARD OF VALUE, MONEY ALSO SERVES AS A STORE OF VALUE-- THAT IS, AS A WAY OF STORING UP PURCHASING POWER IS WHAT YOU DO WHEN YOU SAVE.





SOME TYPES OF MONEY THAT WERE USED IN THE PAST WERE NOT VERY EFFECTIVE IN PERFORMING MONEY'S ROLE AS A STORE OF VALUE.



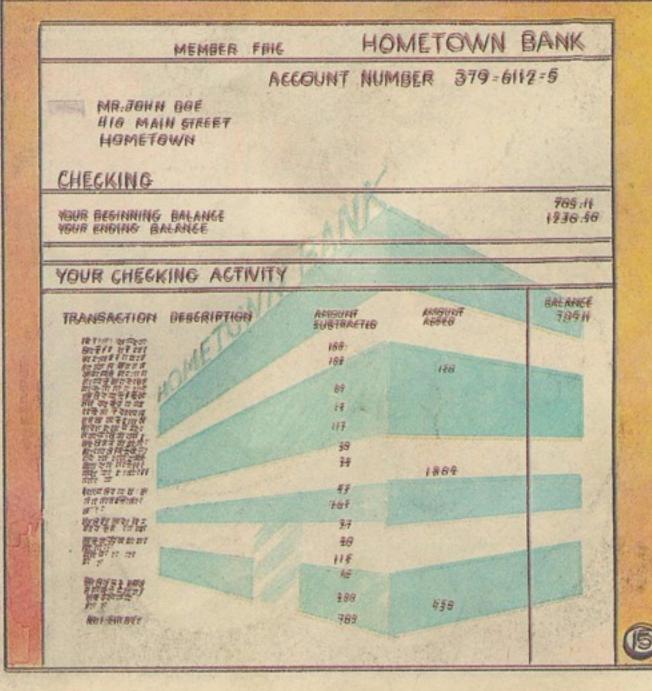
OF PEOPLE SAVED SOME TYPES OF MONEY TOO LONG, THEY MIGHT FIND THAT THEIR SAVINGS HAD ACTUALLY DRIED UP.



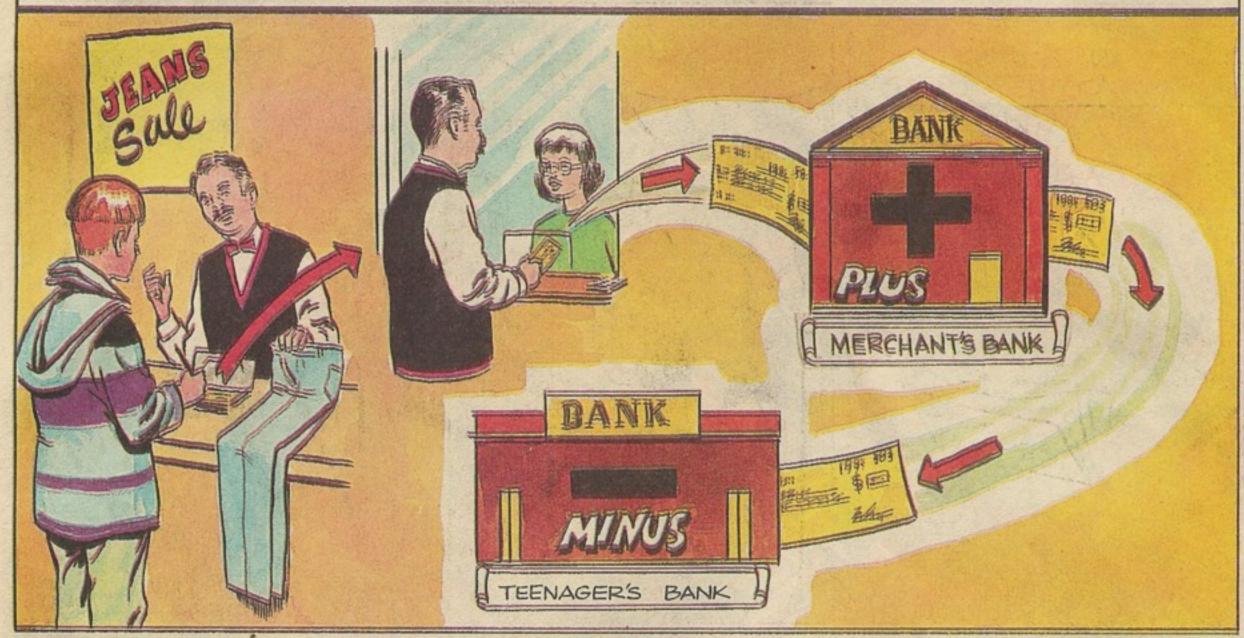
WE'RE ALL FAMILIAR WITH THE COINS AND PAPER MONEY THAT WE USE AS MONEY TODAY.



BUT THAT'S JUST ONE KIND OF MONEY WE USE IN THE UNITED STATES, THE KIND WE KEEP IN OUR POCKETS AND CAN SPEND IN STORES AND RESTAURANTS, NEWSSTANDS, AND MOVIE THEATERS. MOST OF THE U.S. MONEY SUPPLY CONSISTS OF SOMETHING ELSE, HOWEVER. THE MAJORITY OF THE MONEY IN THE UNITED STATES CONSISTS OF THE AMOUNTS THAT PEOPLE AND BUSINESSES HAVE IN CHECKING ACCOUNTS.



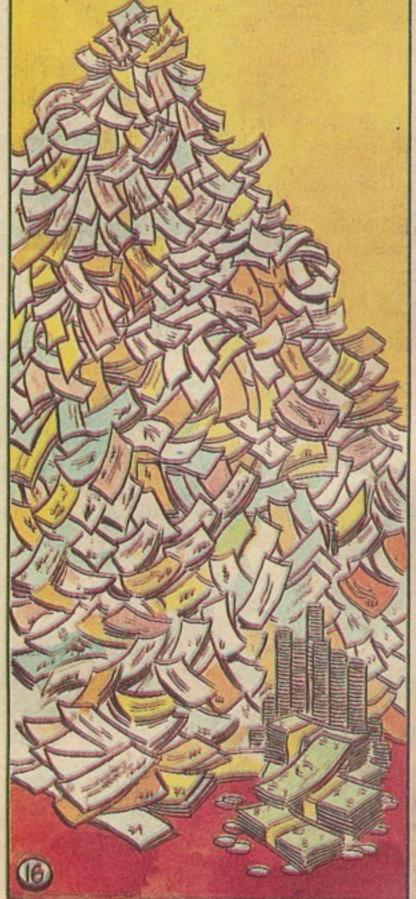
WHEN YOU USE A CHECK TO BUY SOMETHING, YOU'RE TELLING YOUR BANK TO TAKE MONEY FROM YOUR CHECKING ACCOUNT AND SEND IT TO THE OTHER PERSON'S CHECKING ACCOUNT.



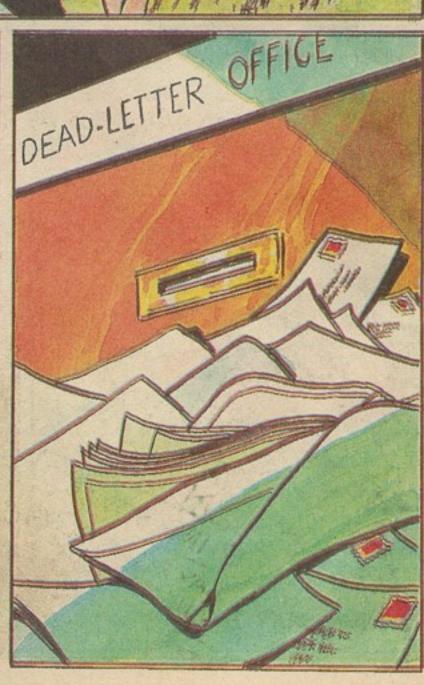
THE VOLUME OF TRANSACTIONS FOR WHICH CHECKS ARE USED IS MUCH LARGER THAN THE VOLUME FOR WHICH CURRENCY IS USED.











NOTHER ADVANTAGE IS CONVENIENCE. THINK, FOR EXAMPLE, OF HOW MUCH EASIER IT IS TO MAIL SOMEONE A CHECK FOR \$19.99 THAN TO MAIL THE SAME AMOUNT IN CASH.



ALSO, A CHECK IS PROOF THAT YOU HAVE MADE A PAYMENT. BUT IF YOU MAIL CASH TO PAY A BILL, YOU HAVE NO PROOF THAT YOU SENT IT.

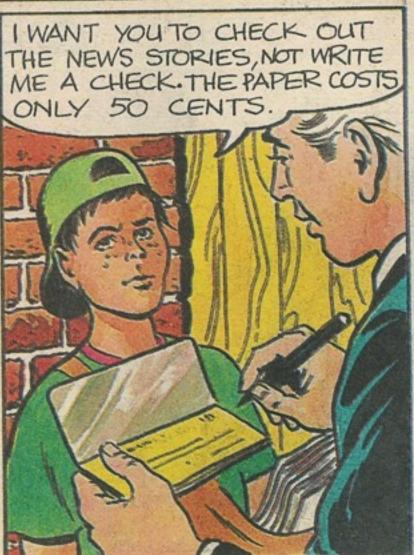


CHECKS OFFER ANOTHER ADVANTAGE: THEY MAKE MONEY EXTREMELY PORTABLE, BECAUSE THE MONEY EXISTS SIMPLY AS A BOOKKEEPING ENTRY AT A BANK, YOU DON'T HAVE TO CARRY IT ANYWHERE IN ORDER TO TRANSFER IT TO SOMEONE ELSE, THE CHECK SERVES AS THE INSTRUCTION TO YOUR BANK TO TRANSFER THE MONEY OUT OF YOUR ACCOUNT AND INTO THE OTHER PERSON'S ACCOUNT.



DESPITE THESE ADVANTAGES, THE COST OF PROCESSING CHECKS MAKES THEIR USE UNECONOMICAL FOR SMALL TRANSACTIONS.







BIKE CHECKS, CREDIT CARDS OFTEN ARE A CONVENIENT WAY TO BUY THINGS.



CREDIT CARD IS NOT MONEY, THOUGH. WHEN YOU CHARGE SOMETHING WITH A CREDIT CARD, YOU ARE SIMPLY PROMISING TO PAY FOR THE ITEM AT A LATER DATE, AFTER YOUR CREDIT CARD BILL ARRIVES.

I CAN USE THE PEN THAT
I BOUGHT WITH A CREDIT
CARD TO WRITE THE CHECK



WE HAVE SEEN THAT CURRENCY AND WHAT IS HELD IN CHECKING ACCOUNTS ARE BOTH KINDS OF MONEY, AND WE KNOW THAT WE WOULD ALL LIKE TO HAVE MORE MONEY.



DOES THAT MEAN THAT EVERYONE WOULD BE BETTER OFF IF WE ALL HAD MORE MONEY?



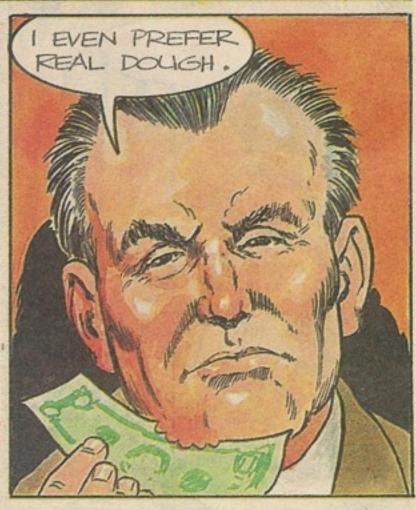
THE ANSWER MAY SURPRISE YOU. IT IS "NO."



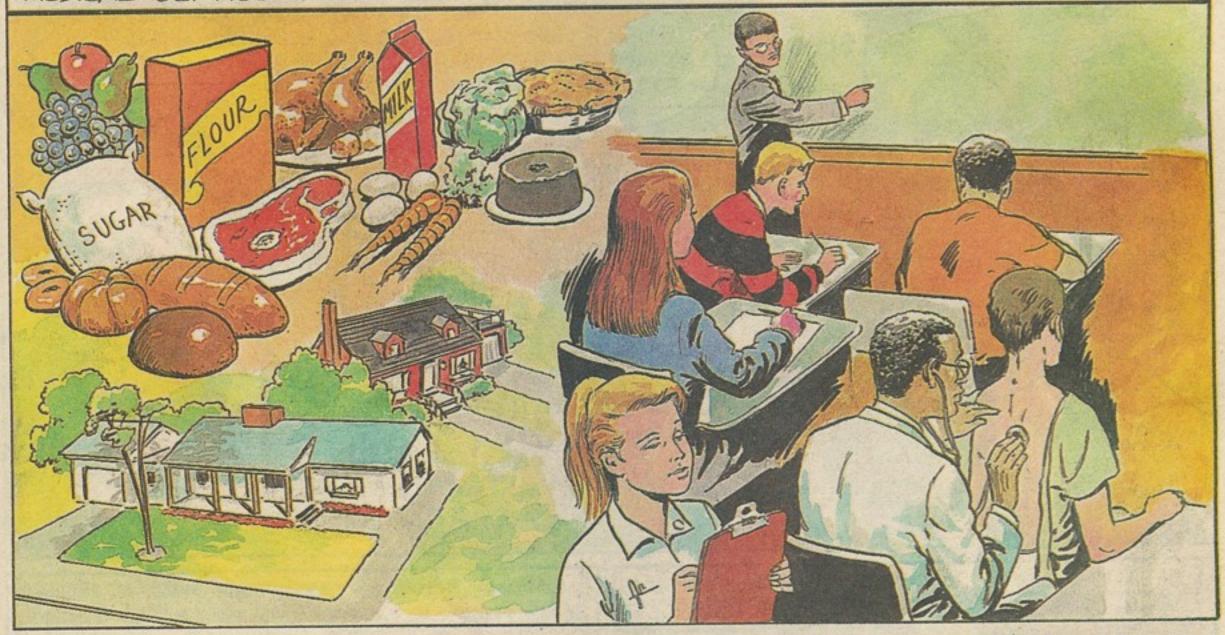
TO LINDERSTAND WHY, WE MUST REMEMBER THAT OUR MONEY HAS NO INTRINSIC VALUE. WE CAN'T EAT IT, FOR EXAMPLE.



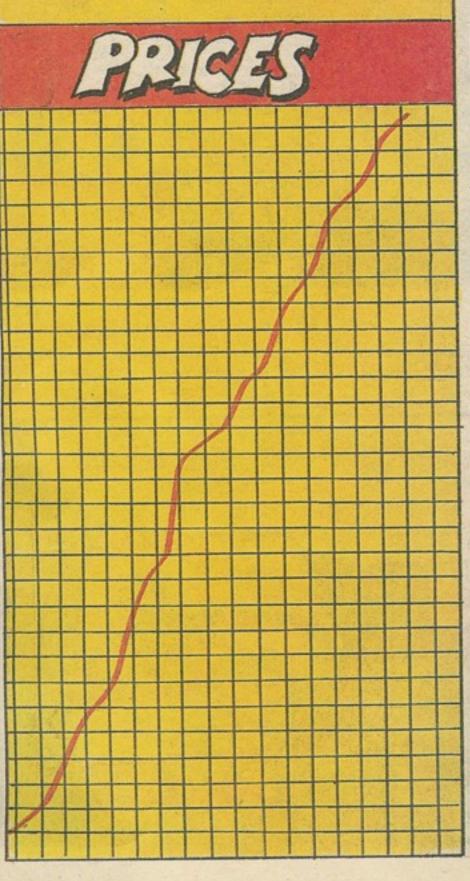


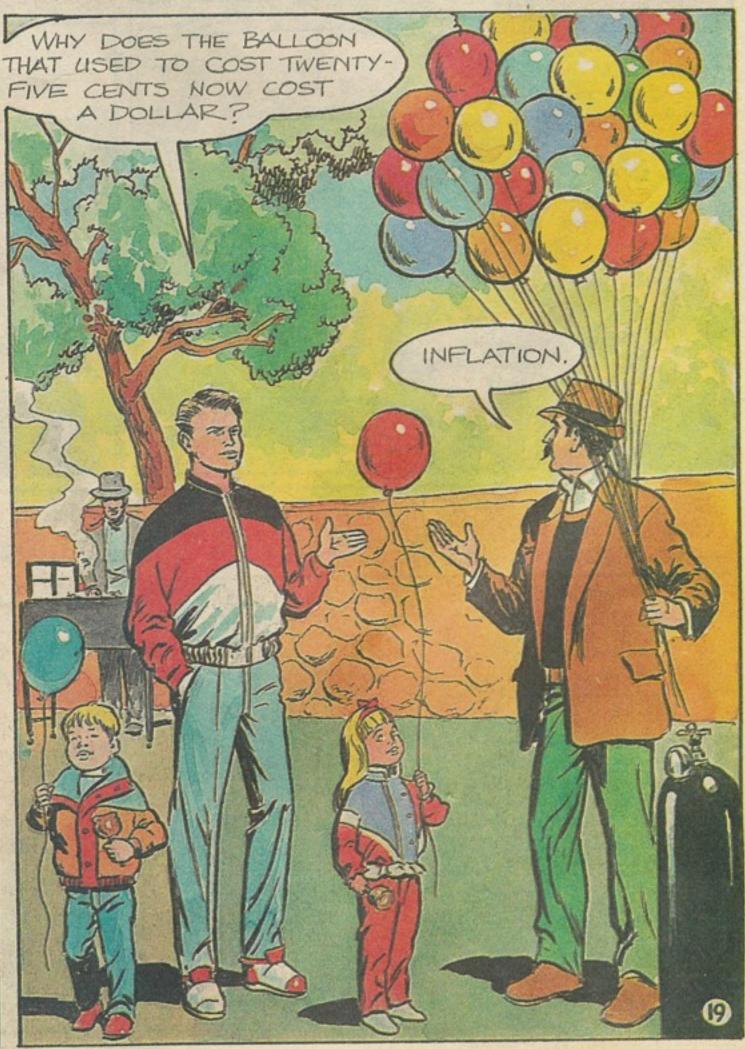


THE THINGS THAT DO HAVE INTRINSIC VALUE ARE THE GOODS AND SERVICES THAT OUR ECONOMY PRODUCES -- THINGS LIKE FOOD, HOUSING, AND EDUCATIONAL AND MEDICAL SERVICES.



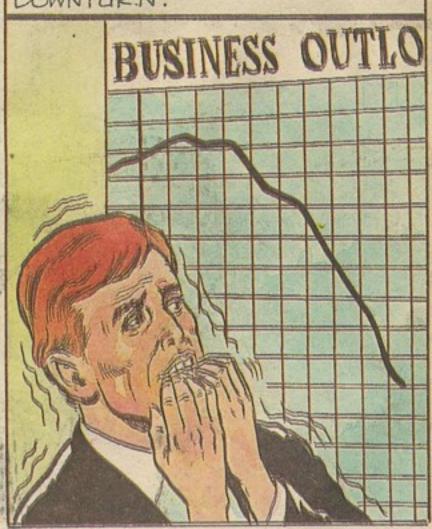
AROUND IN RELATION TO THE NATION'S OUTPUT OF GOODS AND SERVICES, THE RESULT CAN BE INFLATION -- THAT IS, A GENERAL RISE IN PRICES.







OVER TIME, THE UNCERTAINTY AND FEAR CAN LEAD TO A BUSINESS DOWNTURN.



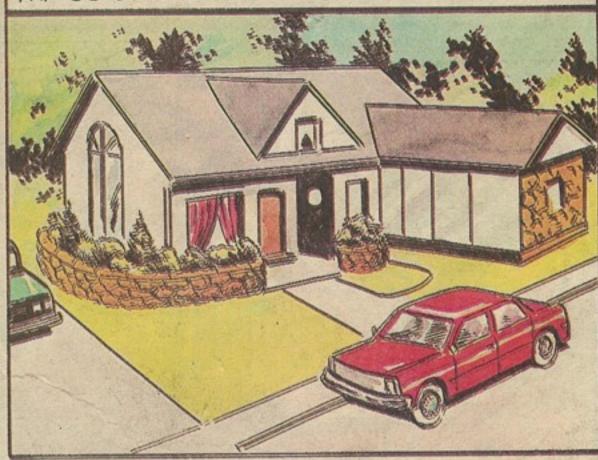
MORE UNEMPLOYMENT.



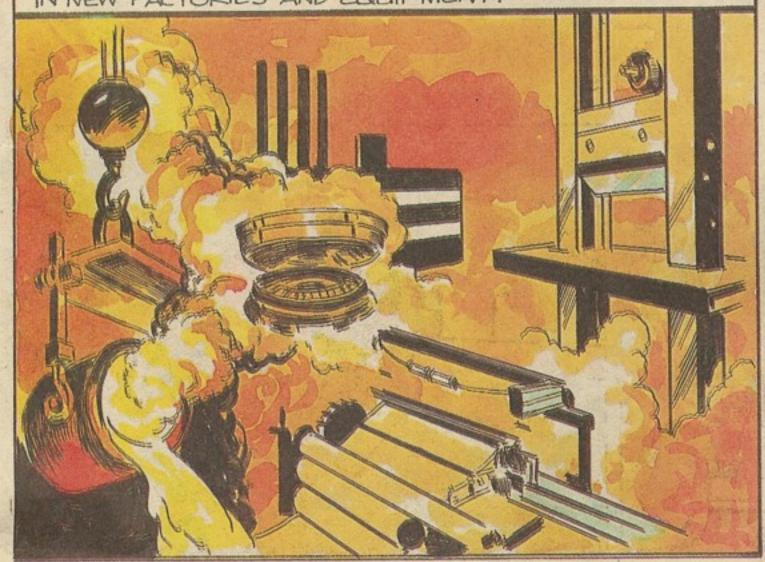
SUPPLY IS A DANGER TO THE HEALTH OF THE ECONOMY, TOO SLOW GROWTH IN THE MONEY SUPPLY ALSO POSES A THREAT.



OF THERE ISN'T ENOUGH MONEY IN THE ECONOMY, PEOPLE WON'T BE ABLE TO BORROW TO BUY THINGS LIKE HOUSES AND CARS.

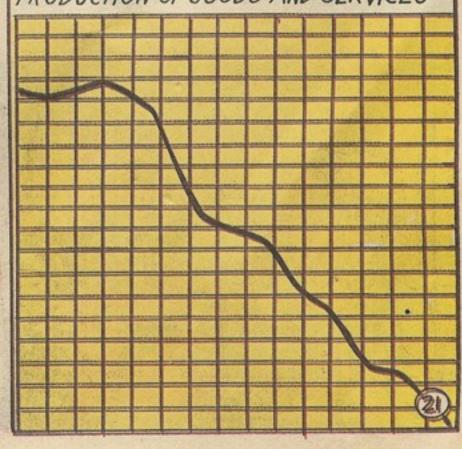


AND BUSINESSES WON'T BE ABLE TO BORROW TO INVEST IN NEW FACTORIES AND EQUIPMENT.



AGAIN, THE RESULT CAN BE A RECESSION -- A PERIOD WHEN THE AMOUNT OF GOODS AND SERVICES THAT THE COUNTRY PRODUCES ACTUALLY DECLINES.

PRODUCTION OF GOODS AND SERVICES





DOW DO WE MAKE SURE THAT THE U.S. MONEY SUPPLY GROWS AT THE RIGHT RATE? THAT'S THE JOB OF THE FEDERAL RESERVE SYSTEM, OR "THE FED," FOR SHORT, WHICH CONGRESS CREATED IN 1913.



THE FED HAS A NUMBER OF TOOLS TO INFLUENCE THE GROWTH OF THE MONEY SUPPLY. ONE IS CALLED "RESERVE REQUIREMENTS."



RESERVE REQUIREMENTS ARE THE PROPORTIONS OF THE DEPOSITS THAT BANKS MUST KEEP ON HAND AND ARE NOT ALLOWED TO LEND OUT. FOR EXAMPLE, IF THE RESERVE REQUIREMENT IS 10% AND YOU DEPOSIT \$100 IN A BANK, THE BANK CAN LEND \$90 OF THAT \$100 TO SOMEONE ELSE, BUT IT IS NOT ALLOWED TO LEND THE REMAINING \$10.



WHOEVER BORROWS THE \$90 FROM THE BANK IS LIKELY TO DEPOSIT IT IN A CHECKING ACCOUNT, TOO. THAT PERSON'S BANK CAN THEN LEND OUT 90% OF THE \$90, OR \$81.

