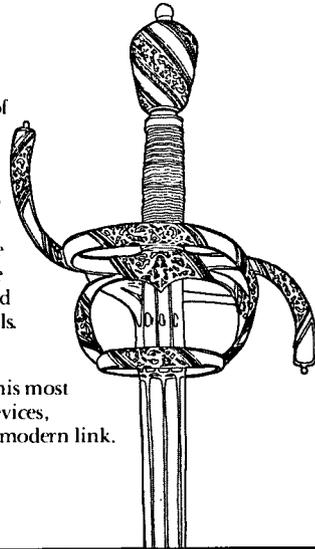


Annual Report 1979



The Depository Trust Company

Custodian for one of the largest groupings of assets ever accumulated, Depository Trust stands in a long line of safekeeping devices which mankind has evolved to protect its stores of value throughout the ages. Its more recent historical lineage embraces a span of some 500 years, beginning in the late Middle Ages, when society again became productive enough so that treasures of many kinds could be accumulated, at least by fortunate individuals.



The illustrations in this report depict this most recent epoch in the history of safekeeping devices, a chain of developments in which DTC is a modern link.

## 1979 Annual Report

<b>Highlights</b>	2	<b>Interfaces in a National Clearance and Settlement System</b>	30
<b>A Message from Management</b>	3	<b>Protection for Participants' Securities</b>	32
<b>History, Ownership and Policies</b>	4	<b>Officers and Directors of The Depository Trust Company</b>	38
<b>Growth in 1979</b>	6	<b>1979 in Retrospect</b>	40
<b>Outlook for Institutional Use</b>	8	<b>Financial Statements</b>	46
<b>Eligible Issues</b>	12	<b>Participants</b>	54
<b>Eligibility of Municipal Bonds</b>	12	<b>Stockholders</b>	56
<b>Basic Services</b>	14	<b>Depository Facilities</b>	56
<b>Institutional Delivery (ID) System</b>	15	<b>Pledges</b>	57
<b>Fast Automated Securities Transfer (FAST)</b>	17	<b>Banks Reported to be Participating in the Depository on an Indirect Basis</b>	58
<b>Ancillary Services</b>	20	<b>Investment Companies Reported to be Using Depository Services</b>	61
<b>Dividends</b>	20	<b>Institutions Participating in the Institutional Delivery (ID) System</b>	62
<b>Voting Rights</b>	21		
<b>Other Ancillary Services</b>	22		
<b>The Automation of Depository Services</b>	26		
<b>Participant Terminal System (PTS)</b>	26		
<b>Other Automated Interfaces</b>	28		



## Highlights

<b>At the End of the Year:</b>	<b>1979</b>	<b>1978</b>
Participants	316	305
Broker-Dealers	236	238
Banks	74	61
Clearing Agencies	6	6
Pledgees	101	91
Depository Facilities	33	34
Eligible Security Issues	13,232	13,028
	(In Billions)	
Value of Securities on Deposit	\$305	\$196
Bank Deposits	\$214	\$128
Broker-Dealer Deposits	\$ 91	\$ 68
Number of Shares on Deposit	9.7	6.9
Bank Deposits	5.3	3.3
Broker-Dealer Deposits	4.4	3.6
Principal Amount of Debt Securities on Deposit	\$41.0	\$25.8
Bank Deposits	\$33.0	\$18.9
Broker-Dealer Deposits	\$ 8.0	\$ 6.9
Value of Securities Pledged for Collateral Loans	\$ 6.8	\$ 8.2
Value of <i>FAST</i> Balance Certificates at Transfer Agents	\$79.8	\$52.2
<b>Total for the Year:</b>	(In Billions)	
Market Value of Book-Entry Deliveries	\$ 684	\$ 500
Cash Dividend and Interest Payments to Users	\$12.2	\$ 8.1

## A Message from Management

This Annual Report is intended to offer readers a better understanding of Depository Trust's role in the specialized field of post-trade processing of corporate securities transactions.

Perhaps the major points of interest in DTC's 1979 performance as an automated clearinghouse for such transactions are the figures showing new record highs of activity. Those figures, found on many pages of this report, illustrate a story of continued growth—for example, a 41% increase in shares on deposit to 9.7 billion at yearend, with total securities in custody then valued at \$305 billion, or 39 million transactions in major services for the year including \$684 billion in book-entry deliveries.

Still other figures show the increased institutional participation in what began twelve years ago as a depository for broker-dealers. At yearend, 74 banks across the country were direct Participants in DTC, with at least 170 more banks participating indirectly through the accounts of correspondent banks among those Participants. All were attracted to depository usage for the same purpose: to reduce labor-intensive securities clearance and settlement costs and gain improved service.

As this report is being written, record high 1980 trading volumes underscore

the need for continued institutional adaptation to the depository system. While this adaptation is certain—because of the cost savings involved—its slow pace in some sectors is worthy of note. It is possible that some insurance and investment companies—and some banks as well—which do not use depositories will be contributing significantly to operational problems when trading volumes rise further, rather than participating in an environment where all in the financial industry enjoy easier processing at lower cost.

We wish to take this opportunity to thank the 1,300 members of DTC's staff for their outstanding effort throughout the year in providing users with efficient, accurate and dependable service. We wish also to express our deep appreciation to those officers of Participants and of industry groups whose cooperation made it possible for DTC to better serve all of its users.



William T. Dentzer, Jr.  
Chairman & Chief Executive Officer



Conrad F. Ahrens  
President & Chief Operating Officer



## History, Ownership and Policies

The Depository Trust Company (DTC) was born out of the securities industry's paperwork crisis in the late 1960s, when processing problems caused major disruption in the financial industry. Accordingly, the depository's first and continuing mandate is to provide efficient, secure and accurate post-trade processing services for transactions in U.S. securities markets.

Three concepts underlie DTC's effort to carry out this charge. First, the immobilization of its user Participants' securities in the depository reduces the need for Participants to maintain their own certificate safekeeping facilities. Second, a computerized book-entry system—in which changes of ownership interest are recorded in the depository's records—replaces costly, problem-prone physical delivery of securities for settlement. Third, the communications system through which DTC acts for its Participants with transfer agents across the country permits more efficient registration of certificates for those desiring them.

In 1968, these concepts were implemented by the New York Stock Exchange through that organization's Central Certificate Service (CCS), a securities

depository established to serve NYSE member firms. Pursuant to plans developed by the *ad hoc* Banking and Securities Industry Committee in 1970-72, DTC was created in early 1973 to acquire the business of CCS and to expand the benefits of the depository approach to other areas of the financial industry, particularly the bank sector.

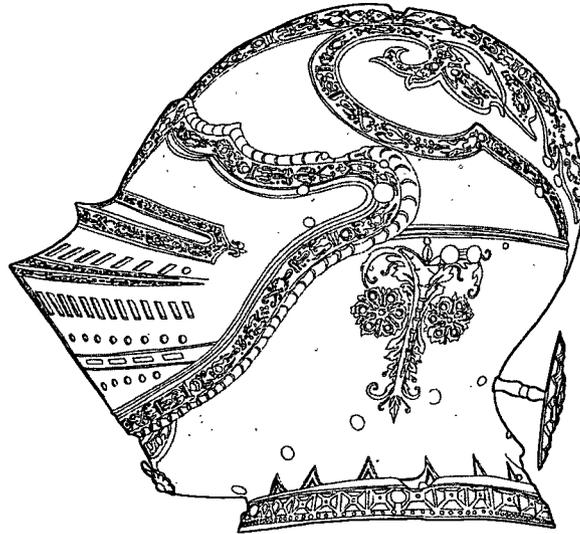
The initial sale of DTC stock by the NYSE to DTC bank Participants and other self-regulatory organizations representing broker-dealer Participants occurred on October 31, 1975, after various state laws restricting depository ownership had been amended. The stockholder base was broadened in October 1976, when the NYSE acted to give broker-dealers the right to own DTC stock directly. By Spring 1977, the number of stockholder Participants or their representatives stood at 50.

### The Governance of The Depository

The procedures for the governance of Depository Trust are carefully framed to reflect the need for objectivity in serving diverse users in the financial community.

Toward the close of the Middle Ages, gold and gems were important forms of wealth. One of the earliest methods for making these assets both portable and safe to transport was to physically incorporate them into the dress armor and weaponry that noblemen carried on their military excursions. In this form, gold and jewels served the dual purpose of ceremonial attire for occasions of state, and collateral for ransoms and other exigencies.

Front and back covers: One of the plates of the Hercules Armor, a 16th century suit especially noted for the consummate craftsmanship of the metalworkers who created it. Page one: Rapier with swept, blackened hilt, damascened in gold and silver, probably of German origin from about the year 1590.



Dress helmet from the armor of Emperor Charles V, made by Kolman Helmschmid at some point prior to 1519, when Charles succeeded his grandfather as Holy Roman Emperor. Known as the "KD" armor (for *Karolus Dux*, or Duke Charles), the entire assemblage of pieces is believed to be the earliest example of the Augsburg style, and is thus an important surviving item in the history of the armorer's craft.

The right to purchase capital stock of the depository is based on a formula which takes into account each Participant's use of the depository during the preceding calendar year. The calculation of use is based equally on fees paid to the depository during that year and the market value of long securities positions in DTC on the last business day of each month of the year. The purchase price of the DTC stock is based on its book value at yearend.

Each year, the amount of stock each Participant is entitled to purchase is recalculated to reflect annual variations in usage. Participants may purchase any, all, or none of the stock to which they are entitled, as they see fit.

The annual stock reallocation occurs prior to the annual stockholders' meeting in late March so that stockholders will be able to vote newly acquired shares in the election of the Board of Directors, which takes place at that meeting. Elections are conducted

under a system of cumulative voting which ensures that no group controlling more than 50% of the stock can elect all Directors. Representation on the Board is thereby made available to users from various sectors of the financial community in proportion to their use of the depository.

At the conclusion of the annual reallocation of DTC stock entitlements in March 1979, elections to purchase entitlements increased the number of stockholders to 55, comprising 28 broker-dealers, 22 banks and 5 self-regulatory organizations and clearing agencies. The 28 broker-dealer stockholder Participants owned 11.4% of DTC stock. The 22 bank Participants owned 32% of DTC stock. The ownership interests of the self-regulatory organizations, which were required to sell stock to accommodate Participant elections to purchase, declined to 44.3% for the New York Stock Exchange, 6.0%

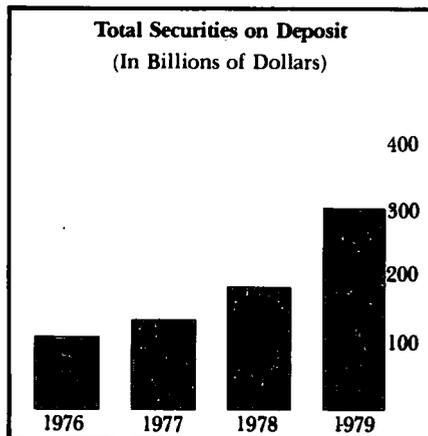


for the American Stock Exchange, and 6.0% for the National Association of Securities Dealers.

It is the depository's policy not to pay dividends to stockholders. This policy is based on the belief that distribution of depository ownership should not be viewed as an investment vehicle, but rather as a means by which diverse users may encourage DTC's responsiveness to their needs through the exercise of their voting rights. The make-up of the depository's Board of Directors reflects this effort to be, and to remain, responsive to user needs.

It is a further policy of DTC to limit profits and return to users, whether or not they are stockholders, such revenues as the Board of Directors believes exceed the funds required for the depository's operation. Pursuant to this policy, DTC refunded \$5.8 million to users in 1979.

The Depository Trust Company is regulated by the Securities and Exchange Commission under the Securities and Exchange Act of 1934, as amended. As a member of the Federal Reserve System and a New York State limited purpose trust company, it is also regulated by the Board of Governors of the Federal Reserve System and the New York State Banking Department.



## Growth in 1979

Once again, Depository Trust enjoyed a record year by virtually every quantitative criterion.

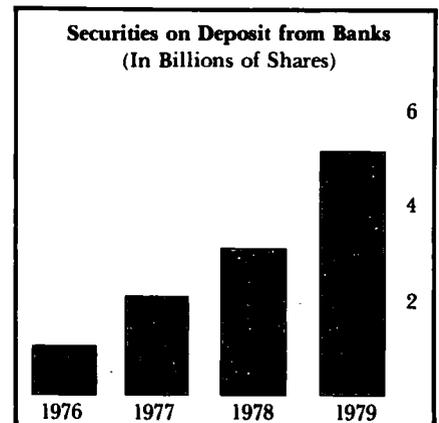
Bank participation remained the single most significant source of the depository's growth. The addition of 13 banks from 11 states brought the number of direct bank Participants to 74—24 headquartered in New York State and 50 in 23 other states and the District of Columbia. At the same time, the number of banks understood to be indirect users of DTC through correspondent relationships with direct bank Participants grew to at least 170 from 106.

By yearend 1979, DTC's securities on deposit from banks had grown to include 5.3 billion shares, with a total (equity plus debt) value of over \$214 billion, up 61% and 67% from 3.3 billion and \$128 billion, respectively, a year earlier. Thirty individual bank Participants each had more than \$1 billion in securities on deposit. Direct and indirect Participants included 33 of the top 50 U.S. banks, and 60 of the top 100, measured by trust assets under management as reported by the Federal Reserve. Another 14 of the top 100 participated in four other securities depositories.

DTC's broker-dealer participation also contributed to the year's record growth. At yearend 1979, there were 236 broker-dealer Participants in DTC, as against 238 a year earlier. These firms are

augmented by approximately 260 more that use DTC through the accounts of correspondent broker-dealer Participants. Broker-dealer securities on deposit included a record 4.4 billion shares, with a total (equity plus debt) value of \$91 billion, up 22% and 34%, respectively, from the 3.6 billion and \$68 billion of yearend 1978. Of the direct broker-dealer Participants, 136 had their principal base of operations in New York State; 100 were headquartered in 23 other states and the District of Columbia.

Other DTC activities also participated in the year's surge of growth.



• During 1979, DTC processed over 39 million individual transactions in connection with its primary services—deposits, deliveries, pledges and withdrawals—for an average of 157,000 transactions per business day in these



Armor for Sigismund II (1520-72), King of Poland (1548-72), fashioned in about 1555 by Kunz Lochner, a leading armorer of Nuremberg. Armor for horses was also a fine art, complete with its own vocabulary: a *chanfron* for the head, a *crinet* around the neck and throat, a *peytral* for the chest and *crupper* for the rump. The complete horse armor, known as a *bard*, weighed 60 to 70 pounds, exclusive of the steel-plated saddle.

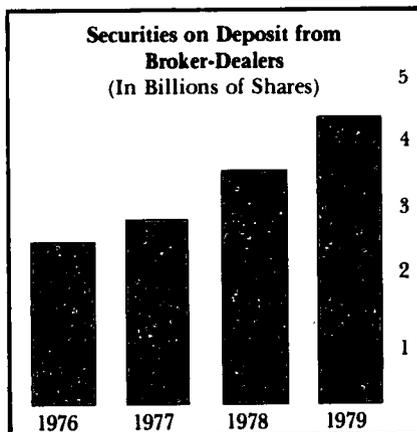
services. This record volume represented a 15% jump from the prior high of 34 million for 1978.

- Cash dividends and interest paid to DTC on securities held for Participants rose by more than 51% in 1979, to \$12.2 billion from \$8.1 billion for 1978.

- The number of banks taking part in DTC's Collateral Loan Program grew to 101 from 91, while the network of Depository Facilities maintained by cooperating banks eased to 33 in 24 major U.S. cities from 34 in 24 cities a year earlier. The Collateral Loan Program permits broker-dealers to collateralize borrowings from banks by means of book-entry pledges to the lender's account of securities held in the borrower's account. Depository Facilities enable banks, broker-dealers, and other financial institutions to deposit securities locally for same-day credit in DTC's book-entry system, rendering the deposits usable that day for such purposes as deliveries and pledges of collateral.

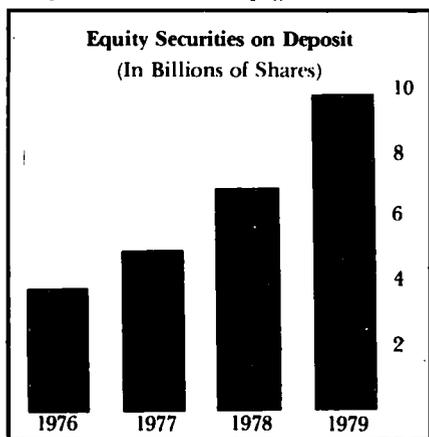
- Volume records were established in a number of DTC's services. Book-entry

settlement volume hit a single-day high of 201 million shares and a one-week high of 820 million in October. Net deposits averaged \$750 million per day in June, a new monthly record. Cash dividends and interest received for Participants hit a single-day peak of \$674 million in December. The depository processed a record \$8 billion stock split in June and \$1 billion debt offering later in the year. Each of these events is described in greater detail in a later section of this report.



### Outlook for Institutional Use

As banks have become more familiar with depository usage and book-entry operations, they have become increasingly active in encouraging their institutional customers to authorize the deposit of their assets into the system. At the same time, an increasing number of institutional investors have initiated the deposit of their assets by so instructing their custodian banks. Accordingly, banks deposited over \$86 billion of their own and other institutional assets into DTC in 1979, or about 40% of the total of such assets that DTC has accumulated since its inception. Further sharp growth is



### Institutional Depository Market at Yearend 1978

(In Billions of Dollars)

Category	Total Assets Held	Total Eligible for Depositories	Percentage Eligible for Depositories
Private Noninsured Pension Funds	\$ 202	\$ 160	79%
Investment Companies	80	65	81%
Life Insurance Companies	549	100	18%
Property-Liability Insurance Companies			
Personal Common Trust Funds	168	125	74%
Mutual Savings Banks	158	40	25%
State and Local Retirement Funds	148	105	71%
Foundations	53	45	85%
Educational Endowments			
<b>TOTAL</b>	<b>\$1,358</b>	<b>\$ 640</b>	<b>47%</b>

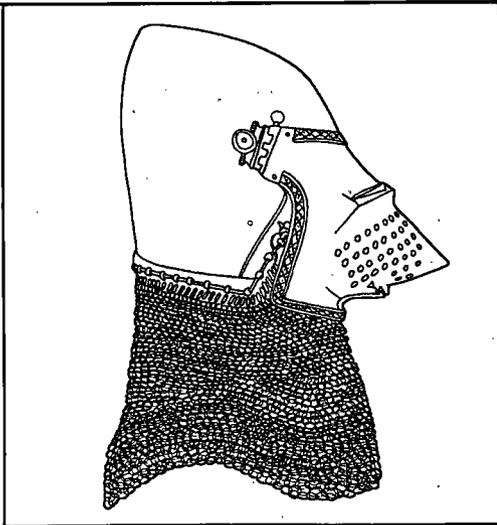
projected for the period ahead, augmented by increases in the list of banks participating in DTC's system.

Nine major categories of institutional investors held \$1.36 trillion in total assets at yearend 1978, up from \$1.23 trillion at yearend 1977, according to preliminary estimates recently published by the Securities and Exchange Commission. DTC estimates the depository-eligible portion of these assets at \$640 billion or a little over 47% of the total.

As can be seen from the table, the potential institutional depository market

is a very large one, even in the unlikely event that present limits determining eligibility are not broadened in the decade ahead. What does not appear in the table—but is on the minds of industry officials and federal and state regulators—is the extent to which the \$640 billion market in currently eligible assets remains to be penetrated. The amount of institutional assets currently in the depository system is estimated at \$250 billion, or only 39% of what is eligible for deposit. These assets, over \$214 billion of which are on deposit with DTC and the balance distributed throughout the rest of the depository

The armor pictured in this illustration is known as a *bascinet* with an *aventail* of mail. The piece was made in Milan in about the year 1390. Within a century, as the use of the English longbow became more widespread, chain mail was almost completely replaced by plate for those wealthy enough to afford it. The common soldier, of course, still had to make do with chain if he was fortunate, and leather if he was not.



system, are in the accounts of approximately 275 U.S banks (74 of them among the top 100 in managed trust assets) that participate in the depositories directly or indirectly.

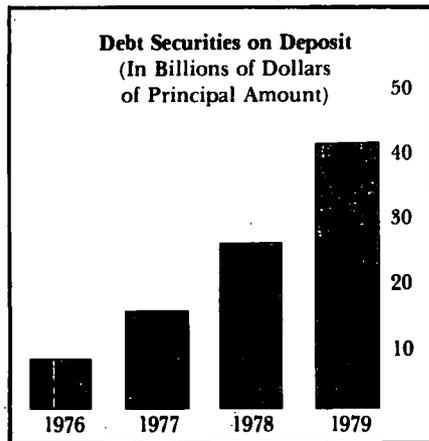
The nature of the effort required to bring more of the \$640 billion into the system varies from category to category. For example, in the categories of life insurance companies, property-liability insurance companies and state and local retirement funds (combined depository-eligible assets of \$205 billion), it is often necessary to deal with state laws and regulations which, having been developed long before there was such a thing as a depository system, contain provisions inconsistent with effective

depository usage by institutions domiciled in those states. Various efforts are under way to resolve these incongruities; it is expected that upwards of \$150 billion from these categories will have been placed in the depository system by 1985. The projection for the remaining categories, where regulatory problems are minor or non-existent, calls for over \$370 billion or about 85% of the eligible total on deposit by 1985.

A major continuing need is to acquaint the appropriate institutional and regulatory personnel with the benefits of depository participation—lower costs, reduced errors, increased flexibility, and simplified operations. DTC's efforts in this direction have been focused on three institutional categories in particular: pension funds, investment companies, and insurance companies, as described below.

#### Deposit of Pension Fund Assets

As the table above indicates, private noninsured pension funds hold some \$202 billion in total assets, of which approximately \$160 billion is invested in depository-eligible securities. DTC bank Participants continued to deposit



private pension fund assets into their accounts throughout 1979; it is believed that a large percentage of the \$160 billion in private pension fund assets has already been placed in the depository system by bank Participants.

The situation is otherwise for state and municipal retirement systems, which collectively hold total assets of about \$148 billion, approximately \$105 billion of which is invested in depository-eligible securities. A major obstacle to depository usage by state and municipal pension funds arises from the fact that these pension funds are state regulated, with each state imposing its own restrictions. Most of these restrictions were enacted long before the depository system was developed and have to be modified to permit depository usage.

Significant strides were made in 1979 to overcome these restrictions so that state and municipal retirement system assets can be placed in a depository. Among the states authorizing the deposit of their funds in 1979 were the State of Montana, through the facilities of Northwestern Bank of Helena and the DTC account of Manufacturers Hanover Trust Company, and the State of Washington, one of the largest custodian customers of The Chase Manhattan Bank, N.A. The State of Washington also subscribed to DTC's Institutional Delivery (*ID*) system for four of its segregated index funds.

DTC is continuing to acquaint appropriate state personnel with the benefits of depository participation for state pension systems. There are currently 27 states that have no regulatory or statutory bars to the use of book-entry and/or the depository system by state pension funds. Indeed, 22 of these states are known to have all or part of their state pension fund assets on deposit or in the process of being deposited at DTC, indirectly through their custodian banks. Another 8 states and the District of Columbia permit depository usage by state pension funds at the discretion of appropriate officials. The remaining 15 states require that pension fund assets be physically domiciled within their state boundaries or be kept in the form of physical certificates wherever they may be domiciled. DTC's efforts are directed at helping eliminate such restrictions.

#### **Deposit of Investment Company Assets**

During 1979, 21 additional mutual funds deposited the eligible portions of their portfolios into DTC through their custodian banks, bringing to 76 the number of mutual funds reported to have done so and to \$11.8 billion the total value of the securities believed to have been so deposited. Comparable yearend 1978 figures were 55 funds with a value of \$8.9 billion.

According to Rule 17f-4 of the Securities and Exchange Commission, a mutual fund's decision regarding

depository usage should be made by that fund's Board of Directors and thereafter reviewed annually. Pursuant to this rule, several additional funds laid the groundwork for 1980 depository usage by preparing proposals for action by their Boards of Directors. On the basis of these reported plans—and the fact that \$11.8 billion or only 18% of the \$65 billion in depository-eligible assets held by investment companies according to SEC estimates has thus far been placed in the depository system—DTC expects substantial growth of mutual fund deposits during the year ahead.

A list of the mutual funds reported to have authorized their custodian banks to deposit eligible portions of their assets with DTC as of yearend 1979 appears elsewhere in this report.

#### **Deposit of Insurance Company Assets**

Although the total value of insurance company assets on deposit at DTC registered a substantial percentage increase in 1979, the dollar value remains small, both in comparison to the assets on deposit from other sectors of the institutional market and in relation to the total value of depository-eligible securities held by insurance companies throughout the U.S. Nevertheless, 1979 did bring some developments of considerable significance for potential deposits in years to come.

As in the case of public pension funds, the major obstacle to depository custody of insurance company owned

Gilt-embossed parade armor, fashioned by Eliseus Libaerts of Antwerp between 1560 and 1565. Libaerts is also the creator of the Hercules Armor, a partial embossing of which appears on the covers of this report.



securities is the framework of statutes and regulations in the various states. Many states permit depository usage at the discretion of the state insurance commissioners, but have not yet established the necessary guidelines for supervisory review. In a number of other states the problem is statutory—frequently in the form of a requirement that the assets be physically domiciled within the state, or that they be kept in the form of physical certificates wherever domiciled.

Recognizing that state barriers have made the insurance sector of the financial industry the slowest to adapt to depositories, the National Association of Insurance Commissioners, through a special Task Force and a new Advisory Committee, acted during 1979 to encourage a resolution of the problem. One of the major goals of this effort was to establish auditing and examination standards within which auditors could verify security assets held in depositories. In line with this goal, the Task Force completed revisions to the *Examiner's Handbook*, a guide used by insurance regulators throughout the U.S. in auditing the financial condition of insurance companies. This step, completed in December, provides a framework of standards, and thus a potential resolution of the procedural

barriers to book-entry.

Earlier in the year, a survey was conducted among state insurance regulatory agencies. It consisted of a questionnaire concerning the nature of the possible barriers to book-entry in their individual jurisdictions, together with a request for additional information and advice on the subject. The analysis of the survey returns, which is now nearing completion, is expected to provide a nationwide picture of the regulatory pattern regarding the use of book-entry by insurance companies.

Notwithstanding the obstacles to depository usage that still exist in many jurisdictions, several large insurance companies did decide to allow their assets to be deposited in DTC in 1979, in cases where existing state restraints were not contravened. The largest deposit came from The Prudential Insurance Company of America, which now has almost \$6 billion on deposit at DTC. At yearend, 128 insurers were reported to be using at least some depository services indirectly through their agent banks, up from a total of 94 at yearend 1978. Of these, some 75 companies have assets on deposit totaling approximately \$13.7 billion in market value, up from \$6 billion a year earlier. The others are participants in the depository's Institutional Delivery (*ID*) system.



## Eligible Issues

The number of issues eligible for DTC services rose to 13, 232 by the end of 1979, an increase of 204 from the 13, 028 of yearend 1978. The expansion was part of DTC's plan to bring the benefits of book-entry delivery and certificate immobilization to an increasing portion of the securities held by Participants.

The 13, 232 issues eligible at the end of 1979 comprised 3,174 common and preferred stocks listed on the New York and American Stock Exchanges; 5,516 equity issues traded over-the-counter; 3,659 issues of listed and unlisted debt securities; 375 U.S. Treasury and Federal Agency issues; 122 warrants, 362 issues represented by American Depository Receipts (ADRs), and 24 municipal bond issues.

### The Eligibility of Municipal Bonds

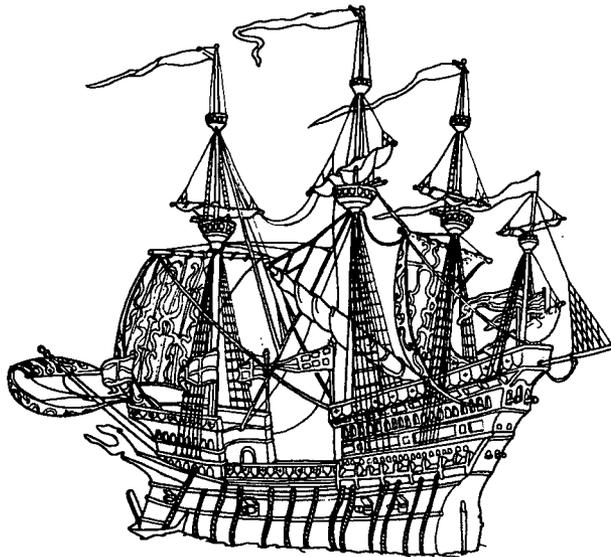
One segment of the securities industry that will prove particularly difficult to relate to a depository system is the

municipal bond segment. In part, the difficulty stems from the characteristics of the securities themselves. Municipals are (1) typically issued as serial bonds, each maturity of which must be treated as a separate issue (and therefore a relatively small one), (2) wholly or partly in bearer form, which the depository does not normally accept for deposit, (3) issued by over 40,000 issuers spread across the U.S., and traded by over 1,700 broker and bank dealers, many of them located away from money market centers, and (4) subject to a wide variety of state and local laws, some of which prohibit out-of-state custodianships.

DTC's effort in this sector to date has been modest. It has largely taken the form of a pilot program under the depository's underwriting service, comprising five distributions between November 1978 and yearend 1979. All of the distributions have involved large issues of the Municipal Assistance Corporation For The City of New York (MAC), and all issues have been interchangeable between bearer and

The transportation of assets has always provided a special challenge to those responsible for it; objects of value are far more vulnerable to depredations when they are in temporary, movable containers than when they are in their permanent—and presumably carefully secured—sites. To meet this problem, security personnel have evolved specialized devices for all types of transport, ranging from the shipment of wealth in warships to the creation of specially armored vehicles manned by armed guards.

Despite the ingenuity with which these devices have been contrived, nothing has succeeded in eliminating in-transit depredations. Nevertheless, the existence of DTC represents one of the biggest strides in this direction, at least as far as registered certificates are concerned, and at least to the degree that these certificates have been immobilized in the depository system.



Contrary to common opinion, galleons were neither exclusively Spanish nor exclusively warships. Rather, they were large, three-masted sailing ships with two or more decks, which could be used either as warships or merchantmen in the 15th and 16th centuries. The ship pictured here is a 16th century English variety, essentially identical in design to the Spanish treasure ships with which it was contemporaneous, and upon which it frequently preyed.

registered forms, with the transfer agent—United States Trust Company of New York—holding most of the DTC inventory in a balance certificate, and with Salomon Brothers as managing underwriter. The purpose of the program was—and is—to demonstrate to those concerned with municipal securities the lower cost and reduced risk of loss or theft associated with book-entry distribution, delivery and pledging of Municipals. Under the pilot, for example, there have been a total of only 1,011 registered certificates issued through DTC in the five underwritings, as against approximately 52,000 bearer certificates which would have had to have been issued if the distributions had not been accomplished through DTC's book-entry system.

To prepare for a serious effort to address this sector, DTC has urged

interested parties to gather information on the many questions involved. Toward the end of 1979, the Municipal Securities Rulemaking Board (MSRB) announced its intention to sponsor an immobilization study in 1980. The immediate goal of the study will be to gather information from the processors and custodians of Municipals on the value and types of transactions occurring during a typical business week, as well as patterns of trading in issues of various sizes. The data will be collected by means of a questionnaire to be mailed to approximately 1,700 municipal bond dealers, brokers, banks, investment companies and others.

The survey data will be an important basis for determining future DTC action in this area.



## Basic Services

**T**here are four basic services Depository Trust performs for Participants:

- It accepts *deposits* of securities for custody;
- It makes computerized book-entry *deliveries* and *pledges* of securities which are immobilized in its custody; and
- It provides for *withdrawals* of securities on a routine or urgent basis.

These services allow a Participant to place securities with DTC for safe-keeping, deliver them conveniently to another party on the books of the depository, collect payment from the other party for the securities delivered, and withdraw certificates desired by any of its customers.

It is the massive use of these services by Participants that creates the economies of scale which offer low-cost processing and speed to users without sacrifice of security and accuracy. Participants instructed DTC to execute 39 million of these transactions in 1979.

Participants usually instruct DTC to perform these activities by means of paper forms, though increasingly their instructions are in automated form, reducing labor-intensive work both for them and for DTC.

### Deposits

**D**eposits of certificates can be made in any eligible security issue at DTC's offices or at various banks

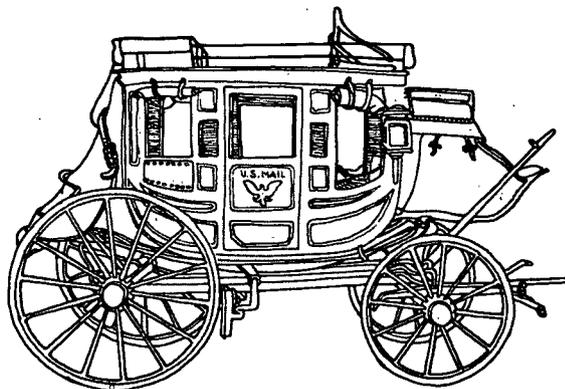
across the country cooperating as DTC Depository Facilities. During 1979, DTC processed daily an average of 24,300 deposits involving 118,400 certificates.

### Deliveries

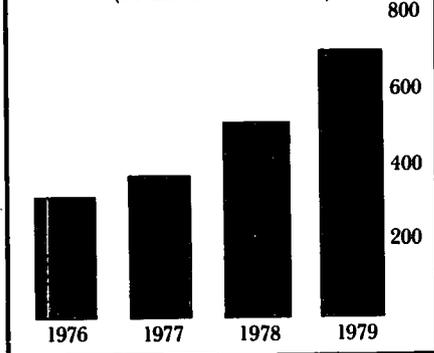
**D**eliveries in the settlement of securities transactions may be with or without money settlement obligation, depending upon the Participant's instructions. In 1979, DTC processed approximately 25 million computer book-entry deliveries among Participants with a settlement value of \$684 billion, including Continuous Net Settlement deliveries from brokers to clearing corporations and from clearing corporations to brokers. This represented a substantial increase from 1978 when about 17 million such deliveries were processed with a value of about \$500 billion.

DTC provides for the settlement of all Participant Deliver Orders when payment is desired, as well as cash dividend and interest payments distributed to Participants and other payments through its daily Settlement System. The basis of this system is a DTC settlement statement which shows each Participant's total money settlement activity by type of transaction and summarizes all transactions into a net dollar amount owed to DTC or to the Participant and paid daily.

The western stagecoach is a familiar object. The model depicted belonged to Wells Fargo & Co.; its use was widespread through much of the western U.S. states and territories in the decades following the Civil War.



**Dollar Value of Deliveries**  
(In Billions of Dollars)



## Institutional Delivery (ID) System

**D**TC's Institutional Delivery (ID) system facilitates the post-trade processing of institutional activity in various markets. It was developed by DTC to reduce errors, costs and processing effort for all parties involved in institutional securities transactions. Institutions do not have to join the depository to realize the benefits of ID; only their agent banks need be Participants.

Briefly stated, the system works as follows:

(1) After executing an institutional order, a broker-dealer furnishes DTC with trade data, which DTC passes on to the broker-dealer's institutional customer

in a standard confirmation format on the morning of the business day next following trade date. Errors can thus be identified and resolved immediately. The ID confirm is considered a legal confirmation by both the broker-dealer and the institution, as well as such entities as the New York and American Stock Exchanges, the National Association of Securities Dealers and the Securities and Exchange Commission. Transactions which may be confirmed by ID are not limited to DTC-eligible securities.

(2) If the institution accepts the trade data, it may affirm it within eight days by forwarding an acknowledgment to DTC directly or through its agent bank. Most acknowledgments arrive at DTC on the second day after trade date. Unacknowledged confirmations prevent automatic trade settlement through DTC.

(3) DTC forwards delivery instructions for agreed trades to the agent bank and broker-dealer. The broker-dealer also receives a list of unacknowledged trade confirmations, when follow-up action is necessary if the trade is to settle.

(4) On the morning of settlement date, assuming that acknowledgement of the confirmation has been timely and that the deliverer has sufficient securities in its DTC account, the depository



automatically completes the delivery of securities by book-entry and processes the related money settlement as directed.

(5) If the scheduled early attempt at settlement fails, the attempted delivery can be recycled while the parties take action to permit later settlement day delivery.

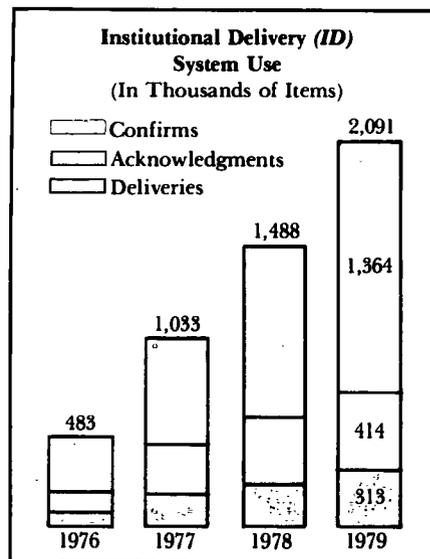
This system greatly automates clearance and settlement, reduces fails and DK (Don't Know) rejected trade deliveries and eliminates holdover items, delivery tickets, credit lists, envelopes and certificate movement.

From the standpoint of DTC's bank Participants, there are five principal applications in which *ID* is particularly useful: (1) trades decided upon and placed by a bank itself in its role as trustee; (2) trades directed by an individual customer of a bank—where the account is very active; (3) trades placed by an institutional customer of a bank on its own behalf and cleared by the bank; (4) trades placed by the investment division of a bank, when custody of the securities is elsewhere; and (5) trades placed by an investment advisor on behalf of an institutional client and cleared by the client's custodian bank.

Use of the *ID* system expanded rapidly in 1979. Average monthly volume of confirmations processed through the system rose to 138,000 for the fourth quarter, up 70% from 81,000 for the comparable 1978 period. At the same time, the number of fully participating institutions increased 88%—to 234 from 125—while the number of

confirms-only institutions rose 13% to 196 from 174. Fully participating institutions are those that use *ID* to receive confirmations from brokers, acknowledge them, and receive and deliver securities by book-entry.

Confirms-only institutions are those that use the system only to receive confirmations; this is usually the initial stage of their *ID* system participation.



Despite this rapid growth, the number of institutions participating in *ID* is still relatively modest in comparison with the number of potential users—banks, insurance companies, mutual funds and investment advisors, to name four of the major categories. Future rapid growth is therefore anticipated as potential users adapt their operating systems. Moreover, each increase in participation adds to

the value of the system for all present and potential users by increasing the universe of parties capable of communicating with their clients or agents through *ID*.

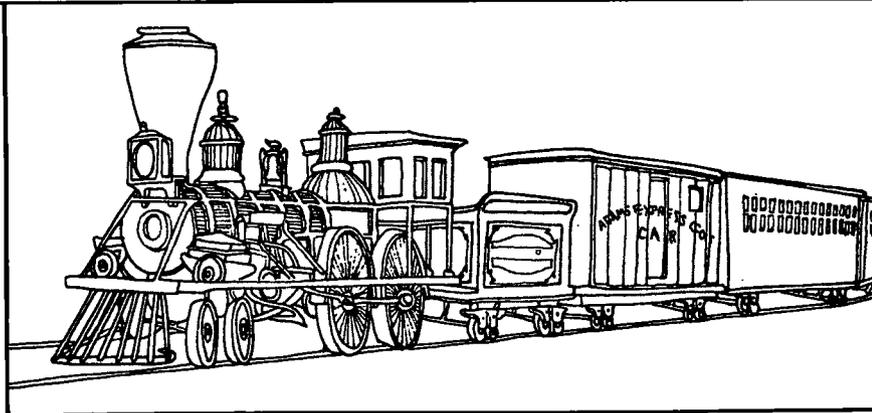
### Pledges

The number of banks taking part in DTC's Collateral Loan Program grew to 101 from 91 during 1979, and to 102 shortly after the turn of the year. This program allows broker-dealers to make book-entry pledges of securities on deposit with DTC as collateral for bank loans or to secure letters of credit, even if the Pledges are not DTC Participants.

At yearend 1979, the value of outstanding pledges totaled \$6.8 billion; 17 individual banks each had over \$100 million in securities pledged to them on DTC's books. These figures do not include some \$1.1 billion in additional pledges to Options Clearing Corporation by brokers and banks, primarily to meet collateralization requirements on CALL option sales.

### Withdrawals

Withdrawals from DTC can be accomplished in either of two ways: (1) Withdrawal-by-transfer (WT), in which securities are transferred routinely to the name of a Participant's customer, or any other name. Normally, the newly registered certificates requested by Participants are available to them one week after DTC receives the withdrawal instructions. (2) Urgent withdrawals of certificates on demand (CODs), in which certificates are



Contemporaneous with the stagecoach, this early western American railroad train added a great deal to the speed and safety with which liquid assets could be transported for long distances across wild terrain. Such transport was not without its risks, however, as several generations of Western film and novel enthusiasts can attest.

released to the requesting Participant in three hours.

In 1979, DTC processed an average of 21,000 WTs per day, for total routine withdrawal instructions of 5.3 million, requiring 9.8 million certificates. During the same period, the depository processed an average of 7,000 urgent CODs per day, for a total of 1.7 million requests satisfied by about 3.8 million certificates.

DTC's Fast Automated Securities Transfer (*FAST*) program provides an alternative, more economical method of processing both types of certificate withdrawals. The *FAST* program is described more fully in the section that follows.

### Fast Automated Securities Transfer (*FAST*)

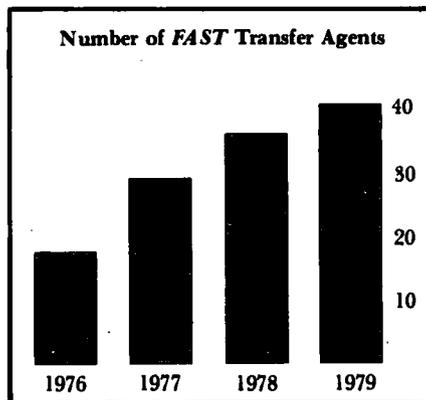
**D**TTC initiated *FAST* to eliminate the cost of unnecessary creation, movement and storage of certificates needed for withdrawals.

Under the *FAST* program, DTC leaves securities with transfer agents in the form of balance certificates registered in the depository's nominee name—Cede & Co. The balance certificates are adjusted daily for DTC deposit and withdrawal activity.

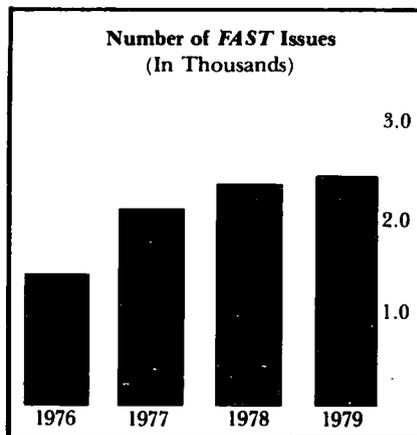
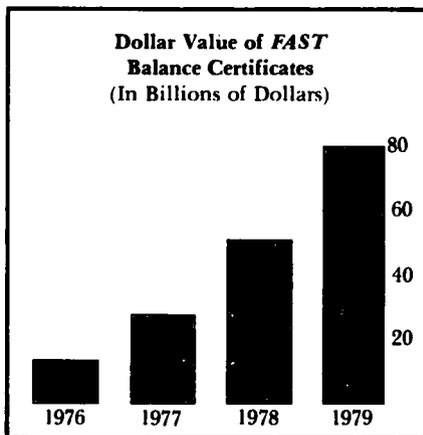
There are two parts to the *FAST* program. The withdrawal-by-transfer

(WT) portion of the program is designed for routine withdrawals; agents can fulfill Participant requests within normal transfer turnaround time, usually five business days.

The certificates-on-demand (COD) portion of *FAST* is designed to include urgent withdrawals, as well as routine WTs. Transfer agents who subscribe to the COD part of *FAST* must make the COD certificates requested by Participants available to DTC overnight, and twice each business day on three hours' notice. Because it covers all types of withdrawals, this part of the program permits DTC to eliminate its entire vault supply of Cede & Co. certificates in eligible issues. Such certificates must be retained by the depository for CODs when agents perform only routine *FAST* withdrawals.



*FAST* confers a number of benefits on all parties involved in the issuance and transfer of securities. Transportation, handling and insurance costs are substantially reduced by the elimination of regular shipments of large value certificates between transfer agents and DTC. The cost of researching dividend claims is also reduced, and proxy voting made easier, by *FAST* CODs, since Cede & Co. certificates no longer must be issued and circulated throughout the financial industry. In addition, corporations and transfer agents enjoy reduced certificate issuance costs by the elimination of hundreds, and sometimes thousands, of certificates for each issue annually. Since the inception of the program, for example, the issuance of over 1.6 million Cede & Co. certificates which would have been required to replenish DTC's vault inventory was avoided.



At yearend 1979, 40 transfer agents held balance certificates valued at \$80 billion in 2,459 issues. The comparable prior-year figures were 36 transfer agents holding 2,435 issues valued at \$52 billion. This growth means that *FAST* withdrawals are possible in about 19% of DTC-eligible issues.

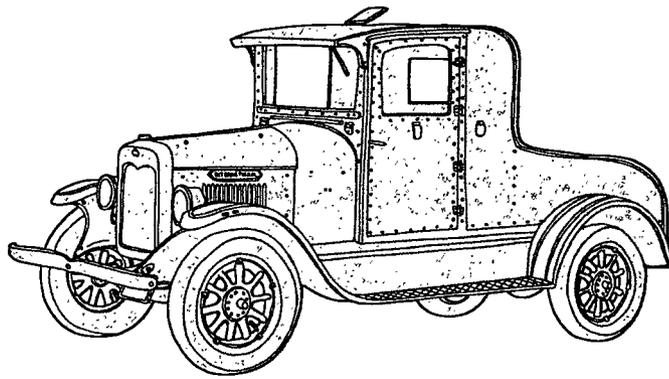
As of December 31, 1979 the following 13 agents participated in the full *FAST* program, holding \$64 billion in 1,583 issues.

- BankAmerica Securities Services
- Company of New York
- Bank of New York (The)
- Bankers Trust Company
- Chase Manhattan Bank, N.A. (The)
- Chemical Bank
- Citibank, N.A.
- First Jersey National Bank

- Girard Bank
- Manufacturers Hanover Trust Company
- Marine Midland Bank
- Morgan Guaranty Trust Company of New York
- Registrar and Transfer Company
- Security Pacific National Bank

The following 27 agents, participating on a WT-only basis held \$16 billion in 876 issues.

- American National Bank and Trust Company of Chicago
- American Telephone & Telegraph Company
- AmeriTrust Company
- Bank of America National Trust and Savings Association



By the early twentieth century, the horse-drawn stagecoach had been replaced by the armor-plated automobile and the name of Brink's had become well-established in the field of asset transportation. This model was built in 1928, obviously for haulage of small, light-weight valuables.

Citizens and Southern  
National Bank (The)  
Connecticut Bank and  
Trust Company (The)  
Fidelity Union  
Trust Company  
First & Merchants  
National Bank  
First National Bank  
of Atlanta (The)  
First National Bank  
of Boston (The)  
First National Bank  
of Chicago (The)  
First Pennsylvania  
Bank, N.A.  
First Union National Bank  
of North Carolina  
Hartford National Bank  
and Trust Company

Irving Trust Company  
Litton Industries  
Maryland National Bank  
National Bank of Detroit  
New England Merchants  
National Bank  
North Carolina  
National Bank  
Northwestern Trust Company  
Riggs National Bank of  
Washington, D.C. (The)  
State Street Bank and  
Trust Company  
United California Bank  
United Missouri Bank  
of Kansas City  
United States Trust Company  
of New York  
Wachovia Bank and  
Trust Company, N.A.



## Ancillary Services

**D**TC's ancillary services flow out of its custody of securities for Participants. They are designed to enhance the efficiency of Participant use of the securities, speed the benefits of their ownership, and provide services in a book-entry environment previously available only when dealing with physical securities.

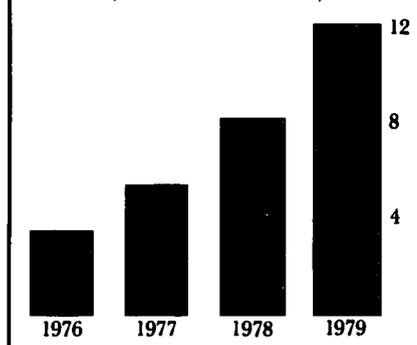
The most important of these services are dividend and interest collection, provision for voting rights, collateralization of options, dividend reinvestment, voluntary offerings, and distribution of underwritings.

These and other services are described more fully in the paragraphs that follow.

### Dividends

**I**n 1979, DTC received over \$12 billion of cash dividend and interest payments from disbursing agents for credit to Participants' accounts. This amount represented over 29,000 individual payments to DTC from approximately 900 bank and corporate paying agents. Applicable to most of the more than 13,000 securities issues eligible for deposit in DTC, these payments resulted in 1.5

**Cash Dividends and Interest Paid**  
(In Billions of Dollars)

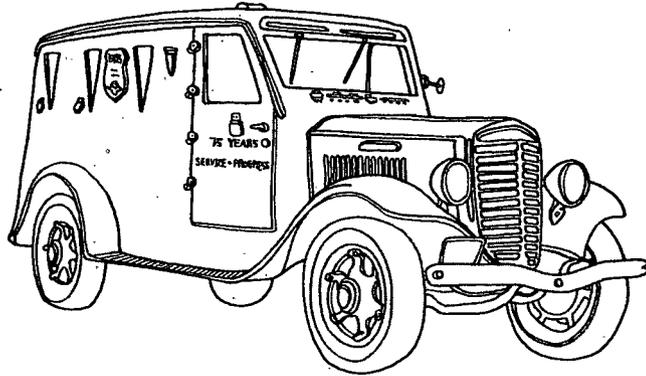


million individual line items of credit to Participant accounts. Stock dividends received for Participants amounted to 490 million shares.

The ease with which DTC accomplished this volume of processing evidences the efficiency of the depository's highly automated internal system. The benefits of this system to DTC users are substantial. Organizations that do not use a depository are faced with the prospect of handling a multitude of checks, coming from many points in the United States and Canada, with all of the associated mail problems, underpayments and other discrepancies, complicated by the need to claim dividends from other parties and to undertake all of the communications, correspondence and follow-up expense and effort associated with that task.

DTC's system spares Participants the trouble of dealing with these tasks and the expense of maintaining the necessary facilities for doing so. Surveys indicate that Participants also tend to receive cash dividends and interest payments more quickly through DTC than if payments were received directly from paying agents. The depository's successful effort in 1979 to increase the collection of such payments on payable date is continuing in 1980.

By 1934, when this model went into service, armored cars had begun to resemble their modern counterparts and Brink's had completed 75 years of operation, an achievement proudly displayed on the door of the truck.



## Voting Rights

Depository Trust arranges for deposited securities to be registered in the name of its nominee, Cede & Co., for three major reasons. (1) To permit prompt determination of whether the deposited certificates are indeed transferable, or whether they are subject to a "stop transfer" order, counterfeit, or otherwise not negotiable. If such a problem is found to exist, DTC can quickly take the appropriate steps to obtain replacement securities from the depositing Participant. (2) To permit re-transfer, when necessary, in the simplest and quickest manner possible. (3) To permit DTC to ensure the proper and timely allocation of dividends, distributions and voting rights to depositors.

Given these reasons for holding securities in the depository's nominee name, one of DTC's primary objectives has been to avoid becoming a new barrier to communication between issuers and beneficial owners. Indeed in some cases, the existence of DTC may assist the corporate issuer in keeping up with changes in the ownership of its voting stock. The depository's Security Position Listing Report lists the number

of shares of the issue on deposit with DTC itemized by Participant; prior to the existence of the depository, many of the shares now included in this report would have been represented by certificates that might have circulated by endorsement for prolonged periods before being re-registered. Security Position Listings are automatically sent to each issuer, free of charge, once each year, indicating Participant positions as of the record date for the issuer's annual meeting. Issuers may also obtain interim listings on a daily, weekly, monthly or dividend-record-day basis, upon request and for a modest fee.

DTC's Omnibus Proxy provides for the exercise of voting rights and for direct communications between issuers and Participants holding their voting securities. In effect, the Omnibus Proxy is an assignment; Cede & Co., the shareholder of record, assigns to each Participant the voting rights that are associated with the shares in that Participant's DTC account as of record date. These assignments are executed on a document called the Omnibus Proxy, which DTC sends to the issuer together with a Security Position Listing Report (which identifies the Participant assignees) right after the record date for



the shareholders' meeting at which the votes may be cast. At the same time, DTC notifies each shareholder Participant that the Omnibus Proxy has been sent to the issuer and of the number of shares the Participant is entitled to vote.

Upon completion of these steps—which normally take place in a single day soon after record date—DTC is removed from the chain of communications between issuer and beneficial owners. Each Participant is able to ask the issuer or its agent directly for whatever quantity of proxy material it needs to discharge its legal obligations to beneficial owners and each issuer is able to contact Participants directly. These communications occur in the same manner as if DTC did not exist.

### Voluntary Offerings

**D**TC offers several services related to voluntary offerings, each designed to keep securities immobilized in the depository during periods when Participants have the right to surrender them to agents for cash and/or other securities. Use of these services grew substantially in 1979. The services themselves are as follows.

- **Conversions**

DTC's conversion procedures allow Participants to use book-entry delivery to surrender convertible bonds or preferred stocks in their depository

accounts for same-day credit in the underlying securities, usually common stock. Participant processing expense is thereby reduced, while the costs of financing transactions during the interval when the certificates would otherwise be at the conversion agent are eliminated. Over 500 convertible issues are eligible for this service; approximately \$970 million of book-entry securities conversions were carried out in 1979.

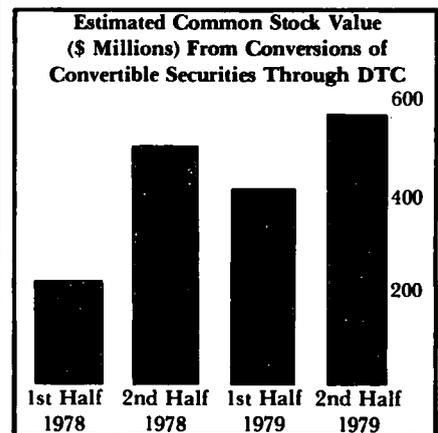
- **Exchange and Tender Offers**

In 1978, Depository Trust processed the first tender offer ever effected by book-entry, passing through to Participants a single payment of almost \$13 million for EG&G, Inc. common stock that had been surrendered through DTC, with the cooperation of New England Merchants National Bank.

In 1979, 16 offers were completed by book-entry, involving 11 agents from seven states. This brought the value of the offerings processed by the program to \$508 million and the number of agents to 13. It is expected that these agents will use this service again for future offers.

Despite the program's success, close to 100 agents who could have used it during 1979 failed to do so. The penalty for the lack of provision for or use of the service is the cost created by the unnecessary withdrawal of securities from the book-entry environment. Agents, issuers and depository Participants thereby incur increased processing costs.

In some cases, Participants also lose timely use of cash payments and, where acceptances are prorated by agents, timely use of returned shares. Accordingly, DTC will continue its efforts to bring additional agents into the program in 1980; support from more investment bankers at the planning stages will assist these efforts.

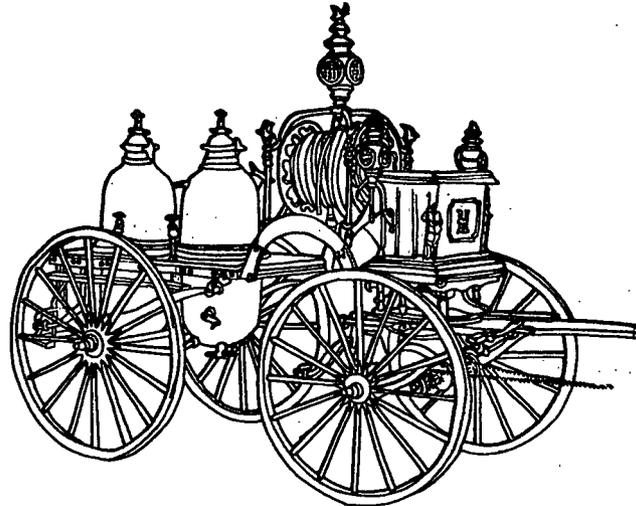


- **Redemption of Floating Rate Notes and Rollovers of Government Securities**

DTC Participants may redeem floating rate notes and other securities with similar repayment options by means of instructions to the depository, the cash proceeds being credited to their DTC settlement accounts. Participants with maturing U.S. Treasury bills on deposit can also use DTC to reinvest, or "roll over," the proceeds into new bills issued on the maturity date. Although the

The risk of losing assets in fires, while it has always existed, has never been as serious as in the twentieth century, when so much liquid wealth is represented by paper. The evolution of firefighting equipment, and its struggle to keep pace with our evolving technical civilization, is depicted in the illustrations that follow.

This risk can also be substantially diminished when paper assets are immobilized under circumstances designed to maximize fire protection. The depository system not only affords fire protection of this sort, but also the ability to reconstruct ownership records and to replace the electronic and paper evidences of asset ownership at speeds inconceivable to custodians as recently as half a century ago.



The Holloway #3 Chemical Engine consisted of two large metal soda-acid tanks and a reel of small diameter fire hose, mounted on a small hand-pulled carriage. Volunteer firemen dragged the apparatus to the fire; colored lenses on the lamp on top of the hose reel designated the name or number of the fire company.

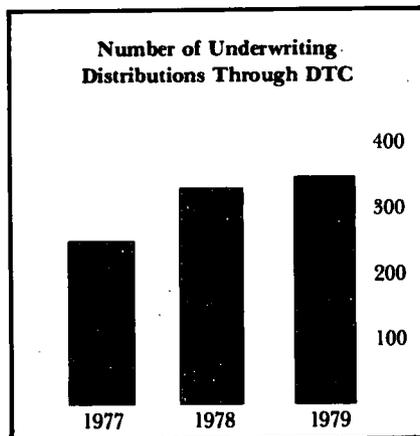
number of transactions effected through these two services is not large, the services themselves are considered useful by Participants in that they reduce the expense associated with exception processing.

### Distribution of Underwritings

The DTC service for the book-entry distribution of and payment for securities offered in public underwritings showed continued growth in 1979, its fourth full year of operation. The service was used by 32 managing underwriters to distribute \$17 billion of the total value of 342 issues. In 1978, the service handled 327 issues for 27 managers with \$16 billion distributed through DTC. The 1979 distributions comprised 186 issues of debt and 156 of equity, with values of \$12 billion and \$5 billion, respectively.

DTC's underwriting distribution service is designed to benefit underwriters and issuers, in addition to broker and bank Participants. Underwriters realize lower financing costs by the elimination of day

loans and, in the case of distant closings, overnight or weekend loans. Issuers are afforded substantial reductions in the issuance and transfer of certificates. Bank and broker Participants receiving book-entry deliveries benefit through the elimination of the endorsement, microfilming, packaging, delivery and receipt of certificates and associated documents, as well as the rapid delivery turnaround normally associated with the use of book-entry.



## Options

Use of DTC's interface with The Options Clearing Corporation (OCC) increased at a rapid pace throughout 1979. By yearend, 47 banks and 35 broker-dealers had securities "pledged" to satisfy OCC requirements, as compared with 35 banks and 30 broker-dealers at the end of 1978. The total value of securities pledged was more than \$1.1 billion, up 75% from the \$653 million of yearend 1978.

The "Third-Party Pledge System" offered by DTC is an alternative to the escrow receipt method, in which a bank holds securities in an escrow account, issuing a receipt which can be used in lieu of the securities to satisfy segregation requirements for the writer's CALL option. Under the Third-Party Pledge System, banks may pledge to OCC securities on deposit at DTC. One major improvement over the escrow receipt method is that changes in the quantity of shares pledged do not require release and re-issuance of escrow receipts, nor do changes in the option series to be covered. In the former case, the amount of shares pledged is simply increased or reduced, as required, while in the latter the pledgor merely submits a "rollover" form supplied by OCC. In addition, processing is simplified because there are no repeated movements of paper among the parties to the transaction. And, finally, since certain shareholders' equity limits of the escrow receipt method do not apply, any bank depository member may use the pledge method to the full extent that it has the securities to pledge.

In 1979, OCC made a major effort to persuade banks and broker-dealers to abandon the use of escrow receipts in favor of the Third-Party Pledge System. By the end of the year, 69% of the value of

securities collateral with OCC was under the Third-Party Pledge System.

In September 1979, OCC filed a proposed rule change with the Securities and Exchange Commission toward the end of establishing a Third-Party Pledge System for PUTS. The proposed rule contemplates a situation in which a PUT writer has deposited cash with a bank and the bank has invested the cash in U.S. Treasury bills. Under these circumstances, the PUT writer would be allowed to instruct the bank to deposit the T-bills with a securities depository and then pledge them to OCC for the account of the OCC Clearing Member carrying the writer's short position. OCC would then reduce the Clearing Member's margin requirements accordingly.

DTC's payment order service, which went into full operation early in 1979, enables banks and broker-dealers to use DTC's settlement system to collect option contract premiums from other Participants, whether such premiums are related to third-party pledges, releases or rollovers of collateral with OCC. The service is expected to contribute significantly to user convenience and growth of the depository's option function.

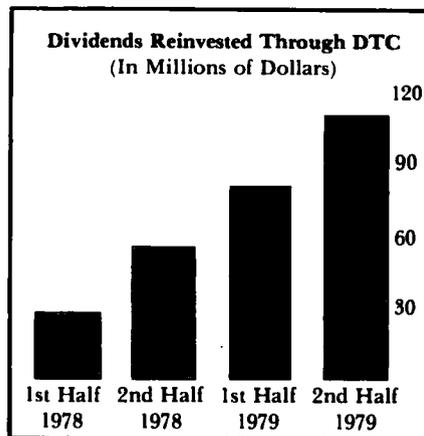
## Dividend Reinvestment

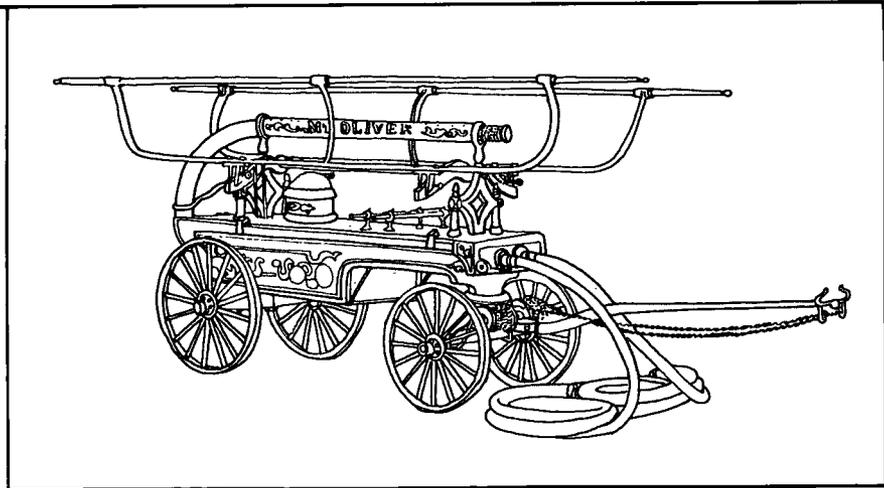
DTC's Dividend Reinvestment Service (DRS) registered one of the highest percentage growth rates of any of the depository's services in 1979, its third full year of operation.

Launched in December 1976 with a single dividend reinvestment plan offered by American Telephone & Telegraph Company, DRS had grown to include 43 participating plans and helped generate almost \$191 million of new capital for participating issuers

through dividend reinvestments in 1979. More than \$60.5 million of these dividends were reinvested during the fourth quarter of 1979 alone, marking the eleventh consecutive quarter-to-quarter increase in Participant use of this service since its implementation, and capping the two years of extraordinarily robust growth depicted in the graph below.

The purpose of DRS is to allow those Participants who wish to reinvest all or part of their dividends in a security that is subject to an issuer's reinvestment plan to do so by book-entry, without withdrawing the underlying shares from their DTC accounts. The advantages to Participants are significant. Without DRS, a Participant would have to either hold back from depositing or withdraw from the depository prior to record date those securities in which dividends might be reinvested, even if a definite decision had not yet been reached. In either case, the certificates involved would have to be handled on an exception basis and the benefits of certificate immobilization through depository usage would be partially defeated. In addition, Participants





The "double stream piano deck fire engine" shown in this drawing takes its name from the fact that its body resembles the rectangular pianos that were in vogue in 1895, when the style was first introduced. Eighteen men, nine to a side, worked 15-foot pump levers to throw twin streams of water,  $\frac{3}{8}$ " in diameter, for distances of over 100 feet.

themselves would have to arrange for reinvestment of dividends through the various plan administrators, and then handle both the certificates for the stock thereby purchased and the checks for cash in lieu of fractional shares. With *DRS*, these cumbersome and duplicative tasks are eliminated as between Participant and plan administrator, and replaced by a far more flexible and less costly set of largely automated book-entry transactions with DTC.

### Special Order-Out

With the cooperation of DTC, the National Securities Clearing Corporation (NSCC) has developed a new service that promises to substantially reduce the delays that brokers normally experience when delivering physical securities to institutional customers around the country. The new service,

which is known as Special Order-Out, permits the delivery of certificates on settlement day to institutions in 8 cities; another 17 cities will be added to the network in the near future.

Under the Special Order-Out service, brokers who are members of NSCC and DTC may use the depository's urgent COD withdrawal procedure to order physical securities out of DTC on the afternoon before settlement day, in anticipation of DTC book-entry receipt of those securities on settlement day. NSCC then ships the certificates to the designated cities for availability on settlement day if book-entry receipt at DTC has occurred as anticipated. Prior to the new service, brokers had to wait until positions had been established on the depository's books on settlement day before initiating the withdrawal for subsequent shipment via courier to the remote city, thereby delaying delivery until the day after settlement day, at best.



## The Automation of Depository Services

**A** major goal of the depository is increasingly to develop the capability of receiving and processing Participant instructions with minimum reliance on manual intervention. Reporting to Participants in automated form and communicating similarly with transfer agents are companion goals in this effort, which is described below.

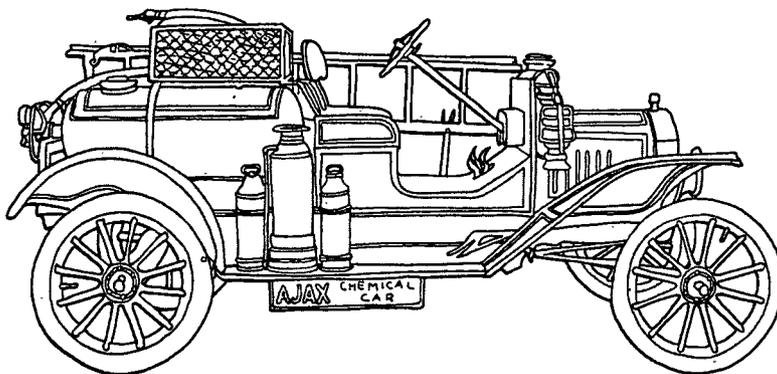
### Participant Terminal System

**T**he depository's Participant Terminal System (*PTS*) is a network of computer terminal stations located in Participants' offices throughout the United States and tied directly to DTC's computer. Participants use their terminals to communicate instructions, inquiries and other messages to DTC and to receive messages and reports from DTC via the printer with which each terminal is equipped. The direct link between Participants and the depository afforded by *PTS* speeds and eases the communications process, replacing the preparation and delivery of hard-copy instructions and reports. This is particularly useful for Participants located outside New York City.

During 1979, the number of terminals in Participants' offices increased to 188 from 149 a year earlier, while the average daily number of total transactions—including inquiries and messages, as well as instructions for specific transactions—grew 80% to 90,000 from 50,000. Among these specific transactions, the average daily number of Deliver Orders rose to 22,000 from 12,000, representing about 54% of the depository's total Deliver Order volume; the average daily number of COD urgent withdrawals increased to 5,500 from slightly under 3,700, representing approximately 70% of total DTC COD volume; and pledges of collateral averaged 600 per day at yearend, or some 22% of the depository's overall pledge volume.

The steady growth of *PTS* since its inception in 1975 reflects the many benefits it accords its users. In addition to its capabilities for processing instructions, *PTS* facilitates improved money management by allowing the quick turnaround or reclamation of deliveries. It is also a major aid in the prompt balancing of settlement statements and—through the capability it provides for the

The Ajax Chemical Fire Truck was one of the earliest gasoline-propelled fire engines. Coming into use in about 1910, it mounted a large soda-acid extinguisher, which mixed sulfuric acid with water and bicarbonate of soda. The gaseous carbon dioxide that resulted then forced water out of the tank and onto the fire through a narrow hose. Chemical fire engines of this type were designed to contain a fire, while larger and more cumbersome engines were arriving and "hooking up" to the local water supply.



verification of CUSIP numbers, issue eligibility, Participants' security positions at DTC, and similar information—the avoidance of costly errors.

A number of accomplishments including the implementation of two report options designed to increase the effectiveness of the depository's Institutional Delivery (*ID*) system, and several system enhancements, highlighted *PTS* developments in 1979.

- The *ID* system T+5 report, issued on the morning of T+5 (the fifth business day following trade date) provides an itemized list of deliveries successfully completed, deliveries that are recycling, and receives credited to Participants' accounts.

- The *ID* Eligible Trade Report available over *PTS* on T+3 and T+4 lists *ID* system trades for potential settlement on T+5. Participants are thus provided with advance information on future deliveries.

- New delivery and urgent withdrawal functions have been added to the system to allow users to enter more than one book-entry delivery or withdrawal per terminal input screen. The new capability permits the user to enter up to six delivery or 14 urgent withdrawal instructions per screen during the day-cycle. The result is greatly improved overall throughput capability since Participants can now transmit data to DTC via *PTS* in a batch environment, rather than one by one.

- A new Pending Inquiry capability allows Participants to determine, by security, which transactions are currently recycling due to insufficient position in their accounts.

- A new Due Bill Information capability enables Participants to include appropriate due bill information on delivery versus payment instructions.

- A new type of terminal configuration has been made available to Participants



who wish to be able to transmit to DTC while the printer associated with their terminal is receiving messages. This separately addressable configuration is available with one or with multiple cathode ray tube (CRT) devices and printers.

To meet the needs of users who cannot cost-justify the use of dedicated *PTS* terminals but who desire a simple informational interface with DTC's computer system, DTC continues to offer an inexpensive alternative—the dial-in terminal. Dial-in terminals have a limited range of functions but they do offer Participants some of the capabilities that *PTS* affords, at substantially less cost.

Additional *PTS* capabilities are currently being developed for 1980 availability:

- Releases of Collateral, through which Participants may enter releases for existing loans with Pledges;
- Multiple Printers, to enable a Participant with more than one CRT to direct confirmations, messages, and reports to the specific printer station of choice;
- *ID* System Authorization/Exception Notices, to enable Participants to enter exceptions to *ID* trades which are due to settle on the following business day.

### Other Automated Interfaces

Many of DTC's Participants have large volumes of depository activity for which input through *PTS* would not be economical. But the underlying data have already been captured by their computers in a form readable by DTC's computers. Accordingly, DTC has been developing systems to accept and provide substantial volumes of Participant data without requiring the receiving party to reprocess them. These systems are described below.

### Magnetic Tape Transfer Instructions

In 1979, DTC made major strides in the development of a system under which it can now (1) receive customer-name withdrawal-by-transfer (WT) instructions from Participants in magnetic tape form, (2) process the tapes through its own computers, and (3) deliver or transmit the resulting DTC output tapes to transfer agents for automated processing through the transfer agents' computer systems.

Such a system offers substantial advantages to all concerned, replacing more costly and error-prone processing procedures.

Prior to 1979, the chief obstacle to such a system was the fact that each transfer agent desired that the tapes it would receive be in a specific, standardized format in order to process them without re-keying the data. The tapes DTC receives from Participants, however, are in a variety of formats, differing from Participant to Participant.

In 1979, DTC's efforts to resolve technical aspects of the problem resulted in the development of an analytical program which enables DTC's computers to accept nonstandard transfer data from Participants and restructure the great majority of them into a standard record for transfer agents. The depository was ready then to apply this capability to the transfer instructions being received increasingly from Participants on magnetic tape. By yearend 1979, the number of Participants submitting transfer instructions in this form grew to 52, accounting for approximately 58% of DTC's average daily transfer volume of about 25,000 instructions for 42,700 certificates.

In November 1979, two *FAST* transfer agents began using the reformatted tapes—American Telephone & Telegraph Company, which acts as its

own agent, and Citibank, N.A. — and a third *FAST* agent, Manufacturers Hanover Trust Company, began accepting the tapes for testing. While still in a pilot phase, the program has elicited a positive response, which augurs well for more widespread participation in the future.

### Magnetic Tape Deliver Orders

DTC's program for the processing of Deliver Order instructions from Participants on magnetic tape began with a pilot involving four broker-dealers and expanded thereafter. In November 1979, ADP Financial Data Services, Inc. became the first service bureau to submit Deliver Orders via tape. A provider of various recordkeeping services for brokers and other financial institutions, ADP's client in this pilot was A.G. Becker Incorporated; ADP has since added Dean Witter Reynolds Inc.

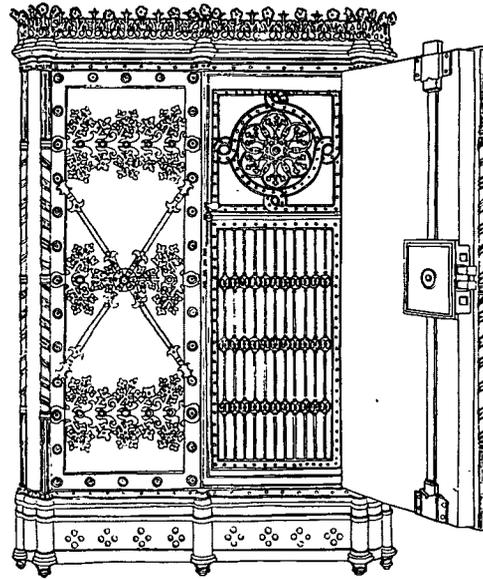
### Magnetic Tape Deposits

A more recent development in the automation of DTC's basic services was a pilot project in deposits, undertaken with the cooperation of Shearson Loeb Rhoades Inc. The primary goal is to simplify the deposit process while reducing errors. Each evening, Shearson submits a tape to DTC which is used to generate a computer listing matched against certificates deposited by Shearson. Each issue deposited is accompanied by a two-part deposit ticket, the first copy to be used internally at DTC and the second to be sent to the transfer agent with the deposited certificates. The preliminary results of the pilot are encouraging; further expansion is expected in 1980.

### Computer Communications Facility

Though use of magnetic tape substantially reduces the manual processing and associated costs of accepting Participants' instructions, it

Locks, strongboxes, and safes have been among the most widely used devices for safeguarding liquid assets over the past 500 years. Dating back to a period when craftsmanship and aesthetic artistry were generally perceived as inseparable, these items frequently incorporate the work of extremely sophisticated artisans, and present an appearance of striking visual charm.



Manufactured in Berlin, but used in London, this ornate safe incorporated mid-19th century notions of the correct balance between beauty and functionalism.

does not eliminate them entirely, since the tapes themselves must be physically handled. Moreover, physical delivery of tapes presents problems for Participants outside the New York City area.

In order to deal with these problems and prepare the next steps in the automation of depository processing, DTC designed a Computer Communications Facility (CCF) to be used for direct computer-to-computer communications between DTC and Participants. This facility will allow for eventual transmission of instructions from Participants' computers to DTC's computer and for transmission of certain DTC data from DTC's computer to Participants' computers.

During 1979, DTC implemented its first CCF application. It permits a Participant's computer system to communicate directly with DTC's computer system and receive information about securities eligible that day for depository processing. At computer-to-computer speeds, information about all of the securities currently eligible at DTC

can be received by a Participant's computer in under five minutes.

In its next phase, CCF will be used for input of night-cycle Deliver Orders. Thereafter, day-cycle deliveries and depository-to-Participant transmissions will be added. DTC hopes ultimately to use the same facility to communicate with other entities in addition to Participants, such as other depositories, transfer agents and Pledges.

#### **Computer Output on Microfiche**

Shortly after midyear, DTC began a program for the production of its computer output for Participants in microfiche form. Two reports—the daily activity statement and the monthly position report—were made available to Participants in lieu of, or in addition to, the conventional hard-copy reports.

At yearend 1979, 78 Participants were receiving the microfiche reports; 13 of them had eliminated the hard-copy versions altogether. The depository plans to produce additional reports in microfiche form in the future.



## Interfaces in a National Clearance and Settlement System

**D**epository Trust's interfaces with other clearing agencies—both clearing corporations and other securities depositories—constitute a major element in the evolving national clearance and settlement system. These interfaces enable participants in various clearing agencies to use their securities positions in one location to settle transactions in other clearing corporations and with users of other depositories by book-entry deliveries. This arrangement eliminates the inter-regional movement of securities certificates, thereby contributing to their further immobilization.

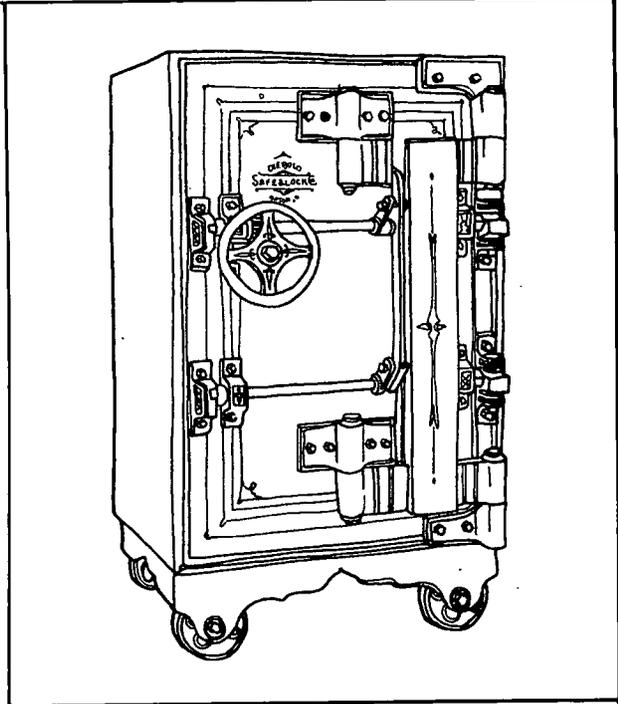
Depository Trust maintains a close interface with the National Securities Clearing Corporation (NSCC) in New York. This relationship grows out of previous DTC interfaces with the New York Stock Exchange's Stock Clearing Corporation, the American Stock Exchange Clearing Corporation, and the National Clearing Corporation of the National Association of Securities Dealers prior to the merger of their activity in NSCC. Broker-dealer Participants in DTC are therefore able to use their positions at DTC to settle their transactions with other broker-dealers cleared by NSCC.

DTC also has operated interfaces with other clearing agencies for several years. These cooperative program relationships exist with the Midwest Securities Trust Company, the Pacific Securities Depository Trust Company

and, more recently, the New England Securities Depository Trust Company. An important facility made possible by these relationships is the "third-party" delivery service, which permits a sole member of any one of these depositories to settle transactions with any member of DTC, eliminating the requirement that a member belong to both depositories in order to effect such settlements.

DTC had also maintained an interface with Stock Clearing Corporation of Philadelphia (SCCP) for a number of years. Under this arrangement, SCCP had been a Participant in DTC and its members were able to settle transactions with DTC members by book-entry. In October 1979, the Philadelphia Depository Trust Company (Philadep), a new subsidiary of Philadelphia Stock Exchange, Inc., became a registered clearing agency with the Securities and Exchange Commission. In November 1979, DTC became a Philadep participant and the relationship was expanded to a full depository-to-depository interface, with SCCP retiring from DTC. The inclusion of third-party delivery capabilities in the interface enables DTC and Philadep participants to effect inter-depository deliveries on the same basis as that which exists between DTC and the other depositories.

An additional interface—with The Options Clearing Corporation—is described elsewhere in this report.



The trend toward function at the expense of ornate workmanship began to assert itself during the latter half of the 19th century. In this Diebold safe, the visual attractiveness derives from the functional, mechanical parts, rather than the filigrees and embossings of the Berlin safe in the preceding illustration.



## Protection for Participants' Securities

Depository Trust is the world's largest custodian of corporate stocks and bonds. Its record holdings and activity—and their steady growth—reflect the fact that the depository's program of safeguards is widely regarded as the most comprehensive yet developed to monitor the movement and custody of securities. DTC's unique system rests upon the extensive internal controls, physical security, repeated internal and external audits, insurance coverage, multimillion dollar protective Participants Fund, and other features described below. Its effectiveness is perhaps best evidenced by three facts.

- In the 12 years since the inception of the Depository Trust system, it has transferred ownership of securities worth almost \$3 trillion.
- There has never been a claim against the DTC Participants Fund.
- There has never been a claim against DTC or its insurers for the negotiation of missing certificates.

### Internal Controls

DTC's internal control system is designed to record the movements and location of every individual certificate in DTC's custody, from the time it is received, through its processing to and from transfer agents, through its entry into and delivery from the vault. The records required by this system are also used to resolve processing errors, facilitate reconciliation and audits and for similar purposes. The key features are as follows.

- Automated certificate-number control is DTC's single most important safeguard. A unique computerized record cross-indexes each certificate by issue, number, denomination and date of receipt, permitting maintenance of control and rapid reconstruction of

paperflow regardless of volume. The data available from this record provide an important tool in reconciliation, research and the collection of dividend and interest payments. Auditing is also facilitated, with the auditors accounting for certificates by denomination and certificate number, when comparing physical certificates to computer generated inventory listings.

- Certificates deposited with DTC normally are quickly transferred into the depository's nominee name, Cede & Co. This step permits prompt determination of certificate validity, i.e. that the certificate is not subject to a "stop-transfer" order or otherwise defective. It also enhances control over the collection of dividends and interest.

- Large denomination "jumbo" certificates are used to consolidate many of the securities on deposit. Because of their high value, "jumbos" are extremely difficult for unauthorized persons to negotiate, and the risk of loss is thereby further reduced.

- DTC places restrictive endorsements on the back of certain "jumbo" certificates to further preclude their negotiation by unauthorized persons.

- Certificates remain in non-negotiable form while in DTC's custody.

- Microfilm records of certificates and their related documentation are made upon receipt into or delivery out of the depository. The film is developed on premises to ensure the capture of all information while the certificates are still in the processing stream.

- Duplicate computer files of all transactions are maintained in separate storage locations, including one remote rural site, permitting prompt reconstruction of files in the event that a processing interruption were to occur. DTC also maintains comprehensive files of original



A portion of the master console in the main command post in DTC's physical security system. The monitor screens permit security guards to view what is occurring in the vault, data processing, and other secured areas. In addition, each closed-circuit camera creates a video tape record of everything in its range.

documents and production reports in addition to the duplicate computer files and microfilm records.

Additionally, proposed significant changes to the internal control system are reviewed by DTC's independent accountants.

### Physical Security

DTC's physical security system is an extremely sophisticated one, encompassing both electronic and physical devices, and a large staff of armed guards and other security professionals.

The salient features of the system include the following:

- An access control mechanism, including floor-to-ceiling steel turnstiles, inhibits unauthorized entry into data processing areas. Entry is restricted to employees with specially encoded photo identification cards, who must also key in an individualized numerical password to secure admission. The turnstiles are monitored by closed circuit television; a record of all entries and exits is maintained.

- A surveillance system of closed circuit television cameras and video monitors provides complete coverage of the vault and other securities processing areas.

- A silent alarm system is strategically located at points throughout the securities processing areas. Vibration alarms are installed to signal any attempt to forcibly penetrate the vault. A modern smoke and heat detection and fire control system protects the vault and computer sites. Systems interruptions or malfunctions themselves trigger independent malfunction alarms that alert the Security Department.

- An armed security force monitors the television surveillance, access control, and fire control systems, screens all persons entering and leaving security areas, and determines the contents of all packages.

- A modern underground vault on DTC's premises contains most of the securities deposited with it. Other securities are kept in the form of balance certificates maintained by qualifying transfer agents.

- Registered securities delivered to or received from transfer agents and other parties are required to be in non-negotiable form.

- Special waste paper treatment and disposal methods help to prevent the escape of usable written information from secured processing areas.



### **Securities Recordkeeping**

DTC uses a double-entry recordkeeping system to control securities positions. Every transaction in a Participant's account is recorded and the physical location of underlying certificates—at DTC, with transfer agents, at other depositories, or in transit—is identified. These records are also used as a source for internal reports and reports to Participants, and by the depository's Reconciliation Division to locate and correct any differences with Participant records.

### **User Verifications**

Among the most effective depository safeguards is the continuous verification of DTC records by users, based on their own records of activity with the depository.

Each morning, Participants and Pledges receive a daily report itemizing and summarizing the previous day's activity in their accounts. These reports start with the opening balance of securities in each issue in which there was a transaction and go on to list each transaction in that issue on that day and the closing balance of securities in that issue after accounting for all transactions. Daily reports of cash transactions are also available. Under the depository's Rules, Participants are required to report any differences between their own records and the depository's statements. DTC has a research staff to help reconcile any differences.

In addition, each Participant and Pledgee receives a monthly position statement showing the status of all of its securities positions, including those in which there may not have been any transactions. Participants and Pledgees are required to confirm the accuracy of

their monthly position statements in writing, within 10 business days after the statement has been made available to them. Failure to confirm can result in a fine under the depository's Rules. These continual confirmations protect the integrity of the DTC system and encourage a high degree of cooperation at the operational level between the depository and its users.

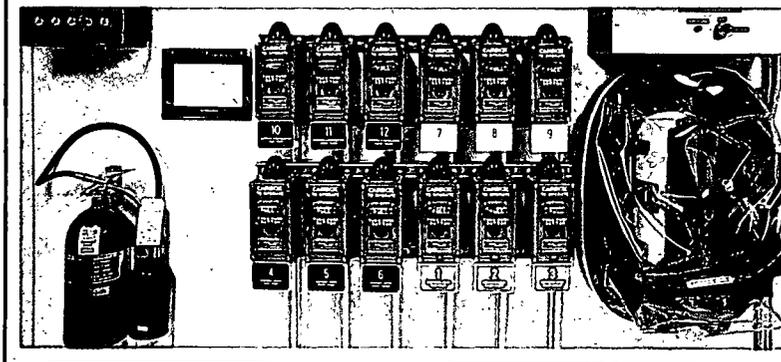
### **Internal and External Audits**

The securities records of Depository Trust are audited both by DTC's internal auditors and by Price Waterhouse & Co., the depository's independent accountants. Through their combined efforts, all securities issues in DTC's vault are counted at least once a year.

The internal audit program focuses on DTC's certificate processing, data processing, and financial operations. Certificate inventory control includes daily counts of all certificates in selected issues in the vault, so scheduled that each issue will be counted at least once a year by DTC's internal or external auditors. To ensure that issues are not selected for counting in a predictable sequence, a random method of selection is used. In addition, special counts of high-value certificates are conducted more frequently. DTC's Auditor submits to the Audit Committee of the Board of Directors monthly reports which summarize the status of his work. The Committee consists of four Directors charged with the responsibility of supervising the Auditor and the Auditing Department and reviewing and approving the internal audit program.

During the course of the year, among other things, Price Waterhouse & Co.:

- examines and reports on DTC's financial statements;



A DTC fire control station with alarms, extinguisher, carbon dioxide controls and a portable life-support unit.

- audits securities records and positions;
- reviews all significant changes in internal controls and operating procedures;
- reviews controls for the safeguarding of securities, dividends, data processing, and other depository operations;
- issues a Report on Review of Internal Accounting Control, which is available to Participants, Pledgees, their accountants and others who may desire it, upon request; and
- issues a Memorandum on Principal Procedures and Internal Accounting Controls, which is also available upon request, and is prepared especially for the use of Participants' independent accountants.

DTC's Audit Committee also reviews the scope of the auditing procedures of the independent accountants, directly receiving all reports issued by those accountants to the depository, and meets with them periodically to discuss the results of their work.

### Insurance

The insurance coverage available for securities deposited in DTC is among the most extensive of any private institution in the financial industry.\*

Specifically, insurance is available in the following amounts per event:

**A. Losses Occurring on Premises:**

1. \$75 million coverage under Primary and Excess Blanket Bonds; plus
2. \$5 million Lost Instrument Bond Premium Policy, covering premiums for purchase of lost instrument bonds for securities losses in excess of \$75 million.

**B. Losses Occurring in Transit by Messenger or Armored Car Carrier:**

1. Primary coverage of
  - (a) \$5 million under Air Courier Messenger Policy covering securities lost in transit via Brink's or Wells Fargo Armored Service Corporation; and
  - (b) \$125 million In-Transit coverage provided by the insurer of the armored car carrier service used by DTC; and

\*The description of insurance protection set forth in this section includes summaries of the terms of DTC's insurance policies and Rules and Procedures, to which reference should be made for complete statements on these subjects.



(c) \$75 million under Primary and Excess Blanket Bonds for securities lost while in the custody of messengers;

2. Excess coverage of

(a) \$75 million under Primary and Excess Blanket Bonds for securities lost while in the custody of an armored carrier;

(b) \$20 million under Excess In-Transit Bond covering securities losses in excess of \$75 million when securities are in the custody of messengers, and in excess of \$200 million when securities are in the custody of an armored car carrier;

(c) \$5 million under Armored Car and Messenger Policy covering securities losses in excess of \$95 million when securities are in the custody of messengers, and in excess of \$220 million when securities are in the custody of an armored car carrier;

(d) \$5 million under Lost Instrument Bond Premium Policy covering premiums for the purchase of lost instrument bonds for securities losses in excess of \$100 million when securities are in the custody of messengers, and in excess of \$225 million when securities are in the custody of an armored car carrier.

**C. Losses Occurring in the Mail:**

1. \$5 million under Mail Policy covering securities lost after having been sent via registered mail;

2. \$5 million under Mail Policy covering securities lost after having been sent via United States Postal Service Express Mail Service, Option 1 (Door-

to-Door) and Post Office-to-Addressee service;

3. \$250,000 under Mail Policy covering securities lost after having been sent via First Class Mail.

Still more protection is available to bank and broker-dealer Participants with their own standard blanket bond coverage, in the form of riders to their policies providing that such bonds will cover securities held by DTC for the account of the Participant. A bank or broker-dealer with such a rider to its blanket bond would be reimbursed by its own insurer (to the extent of the coverage provided by the rider) for its *pro rata* share of uninsured securities losses by DTC in the unlikely event that such losses were to exceed DTC's insurance coverage.

### Participants Fund

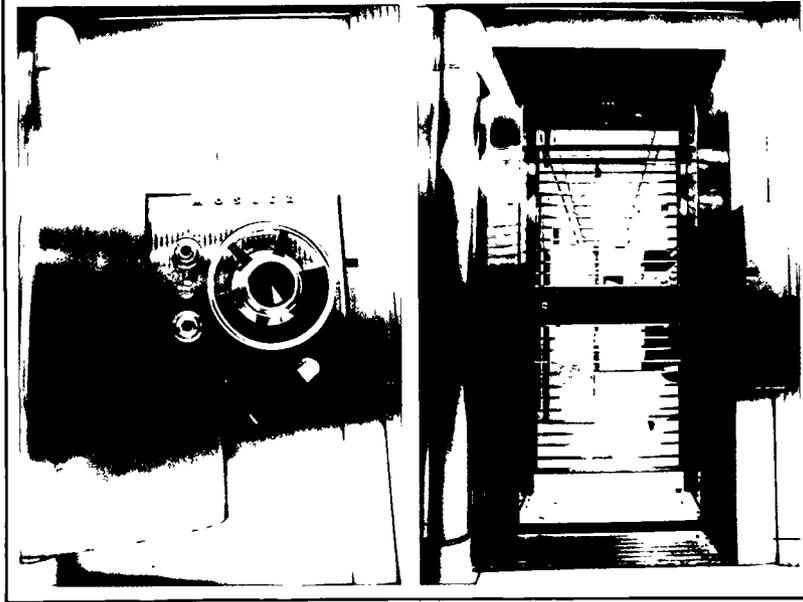
The Participants Fund is a reserve fund contributed by Participants and maintained by DTC to satisfy losses not covered by DTC's insurance. DTC's Rules provide that any such loss would normally be charged initially against undivided profits or retained earnings, but permit the Board of Directors instead to elect to charge it to the Participants Fund.

Should a loss be suffered by DTC due to the failure of a Participant to satisfy its obligations to DTC, such loss would first be charged to that Participant's contribution to the Participants Fund.

If the loss were in excess of that Participant's contribution (or, if the loss were sustained for reasons other than a Participant's failure), the excess may then be charged to the contributions of other Participants to the Participants Fund on a *pro rata* basis.

DTC's Rules provide that, in the event of any charge against a Participant's contribution to the Participants Fund (whether *pro rata* or otherwise), the Participant is required to make an additional contribution to the Participants Fund in an amount equal to the charge.

To date, no charges of any sort have



The two doors to DTC's subterranean vault.

ever been made to the Participants Fund of either DTC or its predecessor organizations.

### **Other Protective Procedures**

Other depository procedures are also available to protect Participants. DTC's Rules provide a variety of remedies to minimize the possibility of loss arising from the unexpected insolvency of a Participant. In the event of signs of a Participant's operational or financial inadequacy, or advice to that effect from self-regulatory organizations or others, DTC carefully monitors that

Participant's further activity, implementing such protective remedies as events warrant.

### **Regulatory Examinations**

The Depository Trust Company is a limited purpose trust company organized under the banking laws of New York State and a member of the Federal Reserve System. As such, DTC undergoes unannounced annual examinations by the New York State Banking Department and the Federal Reserve Bank of New York, which report their findings to DTC's Board of Directors.





The senior officers of DTC: Arnold Fleisig (left), John P. Crowley, Thomas J. Lee, William F. Jaenike, Edward J. McGuire, Jr., Conrad F. Ahrens, William T. Dentzer, Jr. (seated).

## Officers of The Depository Trust Company\*

**William T. Dentzer, Jr.**  
Chairman and Chief  
Executive Officer

**Conrad F. Ahrens**  
President and Chief  
Operating Officer

**Senior Vice Presidents**  
John P. Crowley  
Arnold Fleisig  
William F. Jaenike  
Thomas J. Lee

**Secretary/Counsel**  
Edward J. McGuire, Jr.

**Vice Presidents**  
Nicholas J. Arrigan  
Robert A. Dick  
Dennis J. Dirks  
Michael Fedorochko  
Charles J. Horstmann  
Joseph J. Marino  
Frank Petrillo  
James V. Reilly  
Nishan G. Vartabedian

**Comptroller**  
Michael A. Agnes

**Treasurer**  
John P. Crowley

**Auditor**  
Thomas F. Coleman

**Director of Security**  
Michael T. Mullen

**Assistant Secretary**  
Donna Grant Reilly

**Assistant Treasurer**  
Leonard A. Miele

\*As of March 13, 1980

### Committees of the Board of Directors

**Nominating Committee**  
John T. Roche  
Donald L. Calvin  
Daniel P. Davison

**Audit Committee**  
Joseph A. Vitanza  
Jon A. Bulkley  
Benjamin L. Lubin  
Charles C. Smith

**Compensation Committee**  
John T. Roche  
Carl W. Klemme  
Allan L. Sher

Retiring from the Board of Directors during 1979 were: C.W. Carson, Jr., Vice Chairman and Director, Chemical New York Corporation, Chemical Bank; Robert C. Hall, then Executive Vice President, New York Stock Exchange, Inc.; and John E. Stoddard, Executive Vice President and Chief Financial Officer, Blyth Eastman Dillon & Co. Incorporated.

## The Board of Directors



**William T. Dentzer, Jr.**  
Chairman and Chief Executive Officer, The Depository Trust Company



**Conrad F. Ahrens**  
President and Chief Operating Officer, The Depository Trust Company



**Thomas A. Bigelow**  
Executive Vice President-Operations, Wells Fargo Bank, National Association



**Jon A. Bulkley**  
President and Co-Chief Executive Officer, Moseley, Hallgarten, Estabrook & Weeden Inc., and President, Securities Settlement Corporation



**Donald L. Calvin**  
Executive Vice President, Market Development and Public Affairs, New York Stock Exchange



**Daniel P. Davison**  
President and Chief Operating Officer, United States Trust Company of New York



**William S. Ederly**  
Chairman and President, State Street Boston Corporation, State Street Bank and Trust Company



**C. Richard Justice**  
Senior Vice President, National Association of Securities Dealers, Inc.



**Raymond J. Kalinowski**  
Executive Vice President, Treasurer & Director, A.G. Edwards & Sons, Inc.



**Carl W. Klemme**  
Executive Vice President, Morgan Guaranty Trust Company of New York



**Benjamin L. Lubin**  
Managing Partner, Bruns, Nordeman, Rea & Co.



**John T. Roche**  
Executive Vice President and Director, Kidder, Peabody & Co. Incorporated



**Allan L. Sher**  
Executive Vice President, Finance & Administration, Merrill Lynch, Pierce, Fenner & Smith Incorporated



**Charles C. Smith**  
Executive Vice President, Administration, Bankers Trust Company



**Joseph A. Vitanza**  
Senior Executive Vice President, Drexel Burnham Lambert Incorporated



## 1979 In Retrospect

**B**y almost any account, 1979 was a year of record-breaking growth at DTC. Every month saw some old highs eclipsed and new records achieved. It is, for that reason, not possible to list every noteworthy event of the year in the space available in an Annual Report.

The full year's growth of DTC's various services is described elsewhere in this report. What is hard to convey is the pace and variety of 1979's record-breaking performance. The particular events mentioned below, however, are some of the major milestones that the depository experienced in the year just ended.

### Settlement Volume: A 200-Million-Share Day And An 820-Million Share Week

**D**uring the week of October 15, 1979, DTC handled the greatest automated processing volume in its history. Daily book-entry settlement volume\* rose to an all-time peak of 201 million shares on Monday of that week, followed by near-record volume of 194 million shares just two days later on Wednesday. Settlement volume for the week rose to a daily average of 164 million shares, up from 75 million shares for all of 1978 and 93 million for the nine months of 1979 that preceded the record week.



Charles J. Horstmann (left), Assistant Vice President at DTC, Henry Chertok, Vice President-Customer Securities Group, Chemical Bank, Leonard Haynes, Executive Vice President, Shearson Loeb Rhoades Inc., and Frank Petrillo, Assistant Vice President, Dividend Division at DTC.

William T. Kennaugh (left), Assistant Clerk, Scudder Common Stock Fund, Inc., Charles J. Ducie, Jr., Senior Vice President of The First National Bank of Boston, John M. Lanning, Jr., Director of Participant Services at DTC, and Eugene B. Smith, Vice President of Shawmut Bank of Boston, N.A. and Chairman of the Bank Depository Users Group, discussing the role of DTC and the immobilization of securities on behalf of users in the Boston area.



The smoothness with which the extraordinary volume was handled confirmed the power of book-entry as a tool for handling enormous trade settlement volume without disruptions.

\*DTC's daily settlement volume reflects a combination of New York, American and other Stock Exchange transactions, over-the-counter transactions, and other deliveries, virtually all from the trading day five business days prior to the settlement day.

### Net Deposit Growth: A Full Month At \$750 Million Per Day

Led by net deposits of 348 million shares from bank Participants, DTC's total net deposit growth surged to a record 444 million shares for the month of June and 1.2 billion shares for the first half of the year. Both the 348 million share bank deposit figure and the 444 million share June total dwarfed the previous records of 193 million shares (bank Participants) and 259 million shares (monthly total), which had been set only a month earlier, in May.

In addition, the month's deposits included debt securities in the face amount of approximately \$2.3 billion (virtually all by bank Participants). The combined market value of debt and equity net deposits totaled an unprecedented \$15.7 billion for the month, or \$750 million per business day, up from \$9 billion for the month and \$430 million per day in May.



Joseph Marino (left), Assistant Vice President at DTC, Thomas Fucaloro, Vice President, Tucker, Anthony & R.L. Day, Inc., and Clifford Testa, Senior Securities Officer of DTC.



### Cash Dividends And Interest: \$674 Million In A Single Day

DTC's cash dividend and interest processing operation passed a major milestone on December 10, 1979, when a record \$674 million of dividends and interest were received from disbursing agents and credited to Participants' accounts. Significantly, that number conveys only part of the story of 1979 progress in this area. Other pertinent facts include:

- Comparable payments for March 12, June 11, and September 10, 1979—the other three principal dividend and interest days of the year—came to \$355 million, \$451 million, and \$491 million, respectively, for a four-day total of just under \$2 billion.



Richard J. Loos (left), Senior Vice President, Marine Midland Bank, and Dennis J. Dirks, Assistant Vice President of Operations at DTC.

- For all of 1975, the second full year of DTC's operation, dividends and interest processed approximated \$2.1 billion, or only slightly more than the amounts processed on 1979's four peak days alone.

This rapid growth in the depository's cash dividend and interest processing operation reflects the tremendous increase in the number of shares and bonds on deposit.

○

### An \$8 Billion Stock Split...

On June 1, 1979, DTC received and began the processing of approximately \$8 billion worth of the common stock of International Business Machines Corporation, representing payment of a 4-for-1 stock split by IBM. When the processing was completed, some 115 million shares of IBM common had been credited to Participants' accounts. This distribution was by far the largest of its type ever processed by the depository in both number of shares and dollar value. Delivery to DTC was effected through the combined efforts of IBM and Morgan Guaranty Trust Company of New York, the registrar, under special security and insurance arrangements.

The IBM distribution was a major factor in the record 490 million shares that the depository credited to Participants' accounts in connection with 1,072 stock dividends and stock splits throughout all of 1979.

Philip Travaglini (left), Assistant Vice President, The Fidelity Bank, Philadelphia, Pennsylvania, discusses features of DTC's Participant Terminal System with Robert B. Beck, Director of Participant Services, at DTC.



### ...And A \$1 Billion Debt Offering

In late 1979, the bulk of International Business Machines Corporation's mammoth \$1 billion debt offering was distributed by Salomon Brothers, the lead co-manager (with Merrill Lynch White Weld Capital Markets Group), through DTC. Consisting of \$500 million in notes and \$500 million in debentures, the offering was the biggest ever by a U.S. industrial corporation. The portion distributed through DTC totaled \$775 million, or slightly more than three quarters of the total.

In preparation for the closing, a total of 8,105 certificates were registered in DTC's nominee name (Cede & Co.). After release by the trustee on closing date, these certificates were deposited in Salomon Brothers' DTC account for immediate book-entry delivery to 179 members of the underwriting group in settlement of the note issue, and 181 members in settlement of the debenture issue.

The number of certificates registered in DTC's nominee name is determined on the basis of the depository's best estimates of probable future demand for withdrawals. When establishing a vault

inventory in a new or newly eligible issue, DTC customarily maintains its working inventory of smaller denomination certificates at the minimum level judged necessary to meet foreseeable demand, retaining most of the inventory in the form of one or more "jumbo" certificates for greater efficiency in storage, handling and auditing. Accordingly, the 8,105 certificates issued in connection with the IBM offering took the place of a much larger number of certificates which would have been necessary had the distribution not occurred through DTC.



Larry Postel (left), Director of Communications at DTC, Robert Scales, First Vice President of Operations, Dean Witter Reynolds Inc., and Valentine Stevens, Associate Director of Participant Services at DTC.



### Power Back-up Added...

With the growth of value of assets on deposit and the increasing participation in DTC, the smooth functioning of the depository has become ever more vital to the smooth functioning of the securities industry. In turn, with the increasing automation of the depository's operations, DTC has become increasingly dependent on the availability of uninterrupted supplies of adequate electrical power. These two developments have created a need for increased assurance that the depository would be able to continue functioning under varying scenarios of power disruptions.



Antonio G. Pinto (left), General Partner of Cowen & Company with James J. McGreevey, Participant Services Representative, and Howard Levison, Director-Data Processing Center, both of DTC.

In 1979, DTC moved to meet this need. In conjunction with the Securities Industry Automation Corporation (SIAC), and with the cooperation of the owners of 55 Water Street (the building in which the depository is located), the depository installed an emergency generator system to provide for computer and operating department emergency power needs.

### ... And A New President Takes Office

On October 11, 1979, the post of President of The Depository Trust Company, which had been vacant since late 1974, was filled by the election of Conrad F. Ahrens by the DTC Board of Directors, effective November 1.

Mr. Ahrens, 52, had been with Citibank, N.A. for his entire professional career. Between 1969 and early 1979, he had served as Manager of the Securities Administration Division of the bank's Investment Management Group. In this capacity, he played an active role in planning the 1978 conversion of the New York Stock Exchange's Central Certificate Service into the user-owned Depository Trust Company. At the time of his election to the presidency of DTC, he held the rank of Senior Vice President of Citibank.



**Douglas F. Adams (left), Senior Vice President, The Bank of New York, and Nishan G. Vartabedian, Assistant Vice President of DTC, in a section of the depository's vault.**

The addition of Mr. Ahrens to the depository's top management reflects the continued rapid growth of DTC and the increasing diversity of its operations. As President, Mr. Ahrens serves as Chief Operating Officer, while William T. Dentzer, Jr., who had performed this function in recent years, retains the titles of Chairman of the Board and Chief Executive Officer.



**Judy Parks, Securities Clearance, Houston National Bank, with Stephen B. Hicks, Senior Vice President and Manager Corporate Banking Department of the bank and R. Dwayne Whitehead, Vice President and Treasurer of Rotan Mosle Inc.**



## Report of Independent Accountants

February 4, 1980

To the Board of Directors of  
The Depository Trust Company

We have examined the statement of condition of The Depository Trust Company at December 31, 1979 and 1978 and the related statements of revenues and expenses and undivided profits and of changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. Our examinations also extended to the records of securities held

for others by the Company and included physical examination of selected securities on hand during each year and such confirmation and additional auditing procedures as we considered necessary.

In our opinion, the accompanying financial statements present fairly the financial position of The Depository Trust Company at December 31, 1979 and 1978 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied.

*Pricewaterhouse & Co.*

153 EAST 53RD STREET  
NEW YORK, NEW YORK 10022

The Depository Trust Company  
Statement of Condition

	December 31,	
	1979	1978
<b>Assets</b>		
Cash	\$ 16,883,000	\$ 12,529,000
Repurchase agreements	120,735,000	50,216,000
U.S. Government securities	6,182,000	6,240,000
Receivables:—		
Participants:		
For settlements	11,321,000	6,750,000
For services	3,675,000	2,858,000
Affiliates	458,000	343,000
Dividends, interest and other (Note 5)	5,679,000	7,216,000
Prepaid expenses and deposits	744,000	887,000
Equipment and leasehold improvements, less accumulated depreciation of \$2,259,000 in 1979 and \$1,806,000 in 1978	2,968,000	1,930,000
Leased property under capital leases, less accumulated amortization of \$3,567,000 in 1979 and \$2,587,000 in 1978 (Note 7)	6,511,000	6,291,000
Contributions to Participants Fund, callable on demand (Note 3)	106,488,000	70,658,000
	<u>\$281,644,000</u>	<u>\$165,918,000</u>
<b>Liabilities and stockholders' equity</b>		
<b>Liabilities:—</b>		
Drafts payable	\$ 58,359,000	\$ 7,488,000
Accounts payable and accrued expenses	4,508,000	3,648,000
Payable to Participants:		
On settlements	15,085,000	21,856,000
On receipt of securities	12,986,000	13,237,000
Dividends and interest received (Note 5)	68,464,000	34,274,000
Payable to affiliates	1,458,000	1,177,000
Obligations under capital leases, including \$1,275,000 in 1979 and \$1,092,000 in 1978 due within one year (Note 7)	6,344,000	6,237,000
	<u>167,204,000</u>	<u>87,917,000</u>
Participants Fund (Note 3):		
Deposits received	3,829,000	3,578,000
Contributions callable on demand	106,488,000	70,658,000
	<u>110,317,000</u>	<u>74,236,000</u>
<b>Stockholders' equity:</b>		
Capital stock—authorized, issued and outstanding, 18,500 shares of \$100 par value	1,850,000	1,850,000
Surplus	528,000	492,000
Undivided profits	1,745,000	1,423,000
	<u>4,123,000</u>	<u>3,765,000</u>
	<u>\$281,644,000</u>	<u>\$165,918,000</u>



The Depository Trust Company  
**Statement of Revenues and Expenses and Undivided Profits**

	For the years ended December 31,	
	1979	1978
<b>Revenues:</b>		
Services to Participants (Note 4)	\$44,546,000	\$37,910,000
<i>Less—Refund to Participants (Note 2)</i>	<u>5,800,000</u>	<u>4,700,000</u>
	38,746,000	33,210,000
Services to affiliates (Note 4)	743,000	658,000
Interest income	<u>9,807,000</u>	<u>6,261,000</u>
	<u>49,296,000</u>	<u>40,129,000</u>
<b>Expenses:</b>		
Employee costs	29,221,000	23,451,000
Rent, maintenance and utilities	4,745,000	4,001,000
Data processing rentals and supplies	3,301,000	3,146,000
Charges from affiliates (Note 4)	3,150,000	2,671,000
Professional and other services	2,286,000	2,007,000
Amortization and interest on capital leases (Note 7)	1,528,000	1,111,000
Depreciation and amortization	571,000	408,000
Other expenses (Note 6)	<u>4,136,000</u>	<u>3,312,000</u>
	<u>48,938,000</u>	<u>40,107,000</u>
<b>Excess of revenues over expenses and     refund</b>	358,000	22,000
Undivided profits, beginning of year	1,423,000	1,404,000
Transfer to surplus	<u>(36,000)</u>	<u>(3,000)</u>
<b>Undivided profits, end of year</b>	<u>\$ 1,745,000</u>	<u>\$ 1,423,000</u>

Certain amounts for 1978 have been reclassified for comparative purposes.

The Depository Trust Company  
Statement of Changes in Financial Position

	For the years ended December 31,	
	1979	1978
<b>Financial resources were provided by:</b>		
Operations:		
Excess of revenues over expenses and refund	\$ 358,000	\$ 22,000
Noncash charges (credits) included in expenses—		
Depreciation and amortization	571,000	408,000
Amortization on capital leases	980,000	685,000
Other operating items, net	(103,000)	270,000
Resources provided from operations	1,806,000	1,385,000
Increase (decrease) in drafts payable	50,871,000	(1,180,000)
Increase in payable to Participants	27,168,000	22,933,000
Decrease (increase) in dividends, interest and other receivables	1,717,000	(1,608,000)
Capital lease obligations incurred	1,200,000	2,512,000
Increase in accounts payable and accrued expenses	955,000	1,136,000
Increase in payable to affiliates	281,000	110,000
Increase in cash contributions to Participants Fund	251,000	533,000
Other, net	36,000	(387,000)
	<u>84,285,000</u>	<u>25,434,000</u>
<b>Financial resources were used for:</b>		
Increase in receivable from Participants	5,388,000	5,569,000
Purchases of equipment and leasehold improvements	1,675,000	747,000
Additions to leased property under capital leases	1,200,000	2,512,000
Capital lease payments	1,092,000	738,000
Increase (decrease) in receivable from affiliates	115,000	(64,000)
	<u>9,470,000</u>	<u>9,502,000</u>
Net increase in cash, repurchase agreements and U.S. Government securities during the year	74,815,000	15,932,000
Cash, repurchase agreements and U.S. Government securities, beginning of year	68,985,000	53,053,000
Cash, repurchase agreements and U.S. Government securities, end of year	<u>\$143,800,000</u>	<u>\$68,985,000</u>

Certain amounts for 1978 have been reclassified for comparative purposes.



The Depository Trust Company  
Notes to Financial Statements  
December 31, 1979

**Note 1—Summary of Significant Accounting Policies**

**(a) Securities on deposit**

Securities held by the Company for Participants, which aggregated approximately 9.7 billion share units (\$305 billion at market value) at December 31, 1979 and 6.9 billion share units (\$196 billion at market value) at December 31, 1978, are not recorded in the accompanying financial statements. Cash dividends and interest received or due on such securities and in process of distribution or awaiting claim are recorded in the statement of condition.

**(b) Equipment and leasehold improvements**

Equipment and leasehold improvements are recorded at cost. Equipment is depreciated over estimated useful lives (generally eight years), principally on the sum-of-the-years-digits method. Leasehold improvements are amortized over the life of the related lease in equal annual installments.

**(c) Leases**

Leased property under capital leases, principally data processing equipment and related facilities, is amortized on a straight-line basis over the lease term and interest expense is accrued on the basis of the outstanding lease obligation.

**(d) Pension plan**

The Company's eligible employees are

included in the pension plan of New York Stock Exchange, Inc. and its subsidiary companies. Pension costs charged to expense and paid to New York Stock Exchange, Inc. in 1979 for funding were \$979,000 (1978—\$914,000) and comprise normal costs and amortization over ten years of unfunded prior service costs. The value of the assets of the pension plan of New York Stock Exchange, Inc. at December 31, 1979 exceeded the vested liability thereof.

**(e) Marketable securities**

Repurchase agreements represent U.S. Government and U.S. Government Agency securities purchased under agreements to resell at current prices, generally over periods of three days or less. These agreements are recorded at cost and interest is accrued as earned. U.S. Government securities are recorded at amortized cost, which approximates market value.

**(f) Income taxes**

Provision is made for income taxes applicable to revenues and expenses reported in the financial statements in periods which differ from those in which they are subject to taxation. Investment tax credits on property acquired and leased are applied as a reduction of the income tax provision when the property is placed in service.

**(g) Surplus**

Transfers to surplus of 10% of excess of

revenues over expenses and refund will be made annually until such time as surplus equals 65% of capital stock as required by the New York State Banking Law.

**Note 2—Organization and Ownership**

The Company is a limited purpose trust company providing central securities depository and related services to the securities, banking and related industries. At December 31, 1979, New York Stock Exchange, Inc. owned approximately 45% of the capital stock of the Company, with the remainder owned by the American Stock Exchange, National Association of Securities Dealers and certain Participants or their representatives. A Stockholders Agreement provides for an annual reallocation of the entitlement to purchase outstanding capital stock by eligible Participants or their representatives based on relative depository activity of Participants during the prior year.

Pursuant to a policy adopted by the Board of Directors in 1975, the Company does not pay dividends to stockholders, but refunds to its Participants each year revenues in excess of current needs. In addition, an agreement with New York Stock Exchange, Inc. prior to the adoption of this policy (see Note 4) precludes payment of cash dividends in any year in excess of 6% of stockholders'

equity as at the close of the preceding year until such time as the Company satisfies its obligations under this agreement.

**Note 3—Participants Fund**

Participants in the depository are required to contribute to the Participants Fund amounts which relate to their activity in the depository. The Fund is available to secure the Participants' obligations to the Company, and certain uninsured losses, if such should occur, could be charged to the Fund. Required contributions are received in cash or are callable on demand and secured by securities of the United States or instrumentalities of the United States, states and political subdivisions and certain eligible nonconvertible registered corporate debt securities.

**Note 4—Transactions with Affiliates**

The Company is party to an agreement to purchase software and software related improvements from New York Stock Exchange, Inc. The terms of the agreement provide for the Company to pay 6.5% of its gross revenues from services during the period January 1, 1976 to June 30, 1983, up to a maximum payment of \$13,500,000. Amounts due, which totaled \$2,856,000 in 1979 (1978—\$2,441,000) are determined monthly and paid quarterly over the period of the agreement.



Through December 31, 1979, \$9,273,000 has been recorded with respect to such agreement, leaving a maximum remaining payment of \$4,227,000.

Revenues from Participants (net of refund) for 1979 include \$3,237,000 (1978—\$3,814,000) received from National Securities Clearing Corporation, an affiliate of New York Stock Exchange, Inc. Of this amount, \$3,200,000 (1978—\$3,342,000) was related to services for continuous net settlement deliveries. Additionally, for certain clerical services, the Company received \$299,000 (1978—\$268,000) from National Securities Clearing Corporation.

**Note 5—Dividends and Interest on Securities on Deposit**

The Company receives cash and stock dividends and interest on securities registered in the name of its nominee which it distributes to the owners of the securities. Amounts received on securities withdrawn before the record date but not transferred from the name of the Company's nominee cannot be distributed unless claimed by the owner of the security. At December 31, 1979, cash dividends and interest payable amounted to \$68,464,000, of which \$22,078,000 was distributed to Participants on the next business day and \$46,386,000 was held pending claim by the record date owner of the applicable securities; stock dividends payable and unclaimed (which are not recorded in the accompanying financial statements) totaled \$31,638,000 at market value, representing amounts received by the Company since July 1, 1976.

Unclaimed dividends received prior to July 1, 1976 have been transferred to New York State in accordance with abandoned property laws.

Cash dividends and interest receivable at December 31, 1979 amounted to \$5,533,000 and have been reduced by allowances of \$290,000 for possible losses. Stock dividends receivable (which are not recorded in the accompanying financial statements) amounted to \$2,288,000 at market value and an accrual of \$110,000 has been established for estimated losses on such receivables.

**Note 6—Income Taxes**

Income taxes are included in other expenses. The net income tax provision (benefit) for 1979 and 1978 is summarized as follows:

	<u>1979</u>	<u>1978</u>
Current:		
Federal	\$ 1,000	\$104,000
Investment tax credits	(1,000)	(62,000)
New jobs credit	—	(60,000)
State and local	8,000	48,000
Deferred (State and local)	<u>106,000</u>	<u>(35,000)</u>
	<u>\$114,000</u>	<u>(\$ 5,000)</u>

At December 31, 1979, the Company has available for federal income tax purposes investment tax credit carryforwards of \$310,000, of which \$27,000 expires in 1984, \$121,000 expires in 1985 and \$162,000 expires in 1986 and a new jobs credit carryforward of \$40,000 which expires in 1985.

**Note 7—Leases and Other Commitments**

Capital leases—See Note 1 regarding the treatment of capital leases. The following is a schedule by year of future minimum lease payments under capital leases, together with the present value of the net minimum lease payments as of December 31, 1979:

Year ending December 31:	
1980	\$1,830,000
1981	1,513,000
1982	1,424,000
1983	1,183,000
1984	728,000
1985-1989	<u>1,624,000</u>
Total minimum lease payments	8,302,000
Less—Amount representing interest	<u>1,958,000</u>
Present value of net minimum lease payments (including current installments of \$1,275,000)	<u>\$6,344,000</u>

Operating leases—The Company leases improved office space, substantially all of which as a subtenant of New York Stock



Ceremonial armor of a High Master of the Teutonic Order, made in southern Germany about 1510.

Exchange, Inc. These leases are accounted for as operating leases and provide for base rentals and escalations, plus increases in rental escalations subsequent to 1979. Presented below are the future minimum rental payments required under operating leases having initial noncancellable lease terms in excess of one year as of December 31, 1979:

Year ending December 31:	
1980	\$ 2,984,000
1981	2,984,000
1982	2,984,000
1983	2,892,000
1984	2,806,000
1985-1988	<u>6,510,000</u>
Total minimum payments required	<u>\$21,160,000</u>

Rent expense in 1979 was \$3,064,000 (1978—\$2,476,000) for office space and \$2,071,000 (1978—\$2,035,000) for data processing equipment.

See Note 4 for the commitment under the software purchase agreement.



## Participants†

### Banks (74)

AmeriTrust Company  
Bank of America National Trust and Savings Association  
Bank of New York (The)  
Bank of Tokyo Trust Company (The)  
BankAmerica Securities Services Company of New York  
Bankers Trust Company  
Boston Safe Deposit and Trust Company  
Bradford Trust Company  
Brown Brothers Harriman and Co.  
Central Fidelity Bank, N.A.  
Central National Bank of Cleveland  
Chase Manhattan Bank, N.A. (The)  
Chemical Bank  
Citibank, N.A.  
Citizens and Southern National Bank (The)  
Citizens and Southern National Bank of South Carolina (The)  
Citizens Fidelity Bank and Trust Company  
Connecticut Bank and Trust Company (The)  
Daiwa Bank Limited (The), New York Agency  
Equitable Trust Company (The)  
European American Bank and Trust Company  
Fidelity Bank (The)  
Fidelity Union Trust Company  
Fiduciary Trust Company of New York  
First-City National Bank of Binghamton, N.Y.  
First & Merchants National Bank  
First Jersey National Bank  
First Kentucky Trust Company (The)  
First National Bank in Dallas  
First National Bank in Palm Beach  
First National Bank in St. Louis  
First National Bank of Atlanta (The)  
First National Bank of Birmingham  
First National Bank of Boston (The)  
First National Bank of Maryland (The)  
First National Bank of Minneapolis  
First Pennsylvania Bank, N.A.  
First Tennessee Bank N.A.  
First Union National Bank of North Carolina  
Hartford National Bank and Trust Company  
Indiana National Bank (The)  
Industrial National Bank of Rhode Island  
Irving Trust Company  
Lincoln First Bank of Rochester  
Manufacturers and Traders Trust Company  
Manufacturers Hanover Trust Company  
Manufacturers National Bank of Detroit

Marine Midland Bank  
Maryland National Bank  
M&I Marshall & Ilsley Bank  
Mellon Bank, N.A.  
Mercantile-Safe Deposit and Trust Company  
Merchants National Bank & Trust Company of Indianapolis  
Michigan National Bank—Grand Rapids  
Morgan Guaranty Trust Company of New York  
National Bank of Australasia Limited (The), New York Agency  
National Bank of Detroit  
National Bank of North America  
National Westminster Bank Limited  
New England Merchants National Bank  
North Carolina National Bank  
Northwestern National Bank of Minneapolis  
Riggs National Bank of Washington, D.C. (The)  
Shawmut Bank of Boston, N.A.  
State Street Bank and Trust Company  
Swiss Bank Corporation—New York Branch  
Toledo Trust Company (The)  
Trust Company Bank  
United Bank of Denver, National Association  
United States Trust Company of New York  
United Virginia Bank  
Wachovia Bank and Trust Company, N.A.  
Wells Fargo Bank, National Association  
Zions First National Bank

### Broker-Dealers (236)

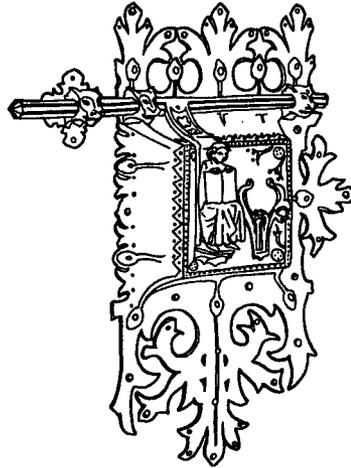
ABD Securities Corporation  
Adler, Coleman & Co.  
Advest, Inc.  
Allen & Company, Incorporated  
Alstead, Strangis & Dempsey Incorporated\*  
American Securities Corporation  
Ames (A.E.) & Co., Incorporated\*  
Anderson & Strudwick, Incorporated\*  
Amhold and S. Bleichroeder, Inc.  
Asiel & Co.  
Atlantic Capital Corporation  
  
Bache Halsey Stuart Shields Incorporated  
Bacon, Whipple & Co.  
Baird, Patrick & Co., Inc.  
Baird (Robert W.) & Co., Incorporated  
Bear, Stearns & Co.  
Beauchamp & Co.  
Becker (A.G.) Incorporated

Bell & Beckwith  
Benton, Newman, Mosca & Co.  
Bernstein (Sanford C.) & Co., Inc.  
Blair (William) & Company  
Blunt Ellis & Loewi Incorporated  
Blyth Eastman Dillon & Co. Incorporated  
Boesky (Ivan F.) and Co.  
Boettcher & Company  
BOSECO, Inc.  
Bradford (J.C.) & Co.  
Branch, Cabell & Co.  
Brandt (H.A.) & Associates, Inc.\*  
Brown (Alex.) & Sons  
Bruns, Nordeman, Rea & Co.  
Burgess & Leith Incorporated  
Burns Fry and Timmins Inc.  
Burns, Pauli & Co., Inc.\*

Cantor, Fitzgerald & Co.  
Cantor (S.B.) & Co., Inc.\*  
Carmcley Corporation  
Carr Securities Corporation  
Carr & Thompson, Inc.\*  
Cartwright (L.) & Co.\*  
Chicago Corporation (The)  
Christopher (B.C.) & Company  
Colin, Hochstin & Co.  
Conklin, Cahill & Co.  
Conning & Co.  
Cosentino & DeFelicis, Inc.\*  
Cowan & Co.  
Craig-Hallum, Inc.

Dain Bosworth Incorporated  
Daiwa Securities America, Inc.  
Davenport & Co. of Virginia, Inc.  
Davis (Shelby Cullom) & Co.  
de Cordova, Cooper & Co.  
Deltac Securities Corporation\*  
Dillon, Read & Co., Inc.  
Doft & Co., Inc.  
Dominick Investor Services Corporation  
Donaldson, Lufkin & Jenrette Securities Corporation  
Drexel Burnham Lambert Incorporated  
Drysdale Securities Corporation

Easton & Co.  
Eberstadt (F.) & Co., Inc.  
Edwards (A.G.) & Sons, Inc.  
Einhorn & Co.  
Engler & Budd Company\*  
Eppler, Guerin & Turner, Inc.  
Equity Securities Trading Co., Inc.\*  
Ernst & Co.  
EuroPartners Securities Corp.  
Evans & Co., Inc.  
Execution Services Incorporated



A 14th century French library lock of forged iron. During the High Middle Ages, before what we now know as "printing" became widespread, illuminated manuscripts were themselves a highly regarded form of wealth.

Fagenson & Co., Inc.  
 Fahnestock & Co.  
 Famco Options, Inc.\*  
 Ferris & Company, Incorporated\*  
 Financial America Securities, Inc.\*  
 First Albany Corporation  
 First Boston Corporation (The)  
 First Jersey Securities, Inc.  
 First Manhattan Co.  
 First Southwest Company  
 First Wall Street Settlement Corporation  
 Folger Nolan Fleming Douglas, Inc.\*  
 Foster & Marshall Inc.  
 Frances (E.G.) Co., Inc.  
 Frank (Walter N.) & Co.  
 Frankel (Wm. V.) & Co., Inc.\*  
 Freehling & Co.  
 Fried (Albert) & Co.

Gintel & Co.  
 Goldberg Securities  
 Goldman, Sachs & Co.  
 Gowell Securities Corp.\*  
 Gradison & Company Incorporated  
 Granger & Company  
 Gruntal & Co.  
 Gruss (Oscar) & Son Incorporated

Haupt, Andrews, Fraiman & Hug  
 Hawthorne Securities Corporation\*  
 Henderson Brothers, Inc.  
 Henderson, Harrison & Co.  
 Herzfeld & Stern  
 Herzog, Heine, Geduld, Inc.  
 Hill, Thompson, Magid & Co., Inc.\*  
 Hilliard (J.J.B.), Lyons (W.L.), Inc.  
 Hirshon, Roth & Co.  
 Howard, Weil, Labouisse, Friedrichs  
 Incorporated  
 Hudson (R.S.) & Co., Inc.\*  
 Hummer (Wayne) & Co.  
 Hutton (E.F.) & Company Inc.

Icahn & Co., Inc.  
 Illinois Company Incorporated (The)

Ingalls & Snyder  
 Institutional Equity Corporation  
 Interstate Securities Corporation

Jacobson (Benjamin) & Sons  
 Janney Montgomery Scott Inc.  
 Jefferies & Company, Inc.  
 Jones (Edward D.) & Co.  
 Josephthal & Co. Incorporated

Kalb, Voorhis & Co.  
 Kaufmann, Alsberg & Co.  
 Kidder, Peabody & Co. Incorporated  
 Kingsley, Boye & Southwood, Inc.  
 Krieger (Henry) & Co.

LaBranche & Co.  
 Laidlaw Adams & Peck Inc.  
 Lasker, Stone & Stern  
 Lawrence (Cyrus J.) Incorporated  
 Lawrence, O'Donnell & Co.  
 Lazard Frères & Co.  
 Lewco Securities Corp.

Mabon, Nugent & Co.  
 Madoff (Bernard L.)  
 Manley, Bennett, McDonald & Co.  
 Marcus & Company  
 Marcus Schloss & Co., Inc.  
 Marks (Carl) & Co., Inc.  
 Masten (A.E.) & Co., Incorporated  
 Mayer & Schweitzer, Inc.  
 McDonald & Company  
 McLeod Young Weir Incorporated  
 Meehan (M.J.) & Company  
 Merrill Lynch, Pierce, Fenner & Smith  
 Incorporated  
 Mesirow & Company  
 Mitchel, Schreiber, Watts & Co., Inc.  
 Mitchum, Jones & Templeton, Inc.  
 MKI Securities Corp.  
 Montgomery Securities  
 Moore & Schley, Cameron & Co.

\* NSCC Sponsored Account  
 † As of December 31, 1979



Morgan Keegan & Company, Inc.  
Morgan, Olmstead, Kennedy & Gardner,  
Incorporated  
Morgan Stanley & Co. Incorporated  
Muir (John) & Co.  
Muller & Company  
Murphey, Marseilles & Smith  
Murphy, Durieu & Naddell

Neuberger & Berman  
Newhard, Cook & Co. Incorporated  
Nick (J.F.) & Co.  
Nomura Securities International, Inc.  
Norris & Hirschberg, Inc.\*

Oppenheimer & Co., Inc.

Paine, Webber, Jackson & Curtis  
Incorporated  
Parker, Weissenborn & Moynahan, Inc.\*  
Pasternack Securities  
Pforzheimer (Carl H.) & Co.  
Piper, Jaffray & Hopwood, Incorporated  
Pitfield, Mackay & Co., Inc.  
Prescott, Ball & Turben  
Purcell, Graham & Co., Inc.

Q & R Clearing Corporation  
Quinn (E.J.) & Co., Inc.\*

Rauscher Pierce Refsnes Corporation  
Raymond, James & Associates, Inc.  
Reaves (W.H.) & Co., Inc.  
Reich & Co., Inc.  
Rice Securities, Inc.  
Richardson Securities, Inc.  
Riviere Securities Corporation\*  
Robb, Peck, McCooey & Co., Inc.  
Robertson, Colman, Stephens  
& Woodman

Robinson-Humphrey Company, Inc.  
(The)  
Rodman & Renshaw, Inc.  
Roney (Wm. C.) & Company  
Ross (Arthur H.) Inc.  
Rotan Mosle Inc.  
Rothschild (L.F.), Unterberg, Towbin  
Roulston and Company, Inc.  
Rowland (R.) & Co., Incorporated  
Ryan (John J.) & Co.\*

Sade & Co.  
Salomon Brothers  
Schapiro (M.A.) & Co., Inc.  
Scherck, Stein & Franc, Inc.\*  
Securities Settlement Corporation  
Seligman (J. & W.) & Co.  
Shaine (H.B.) & Co., Inc.  
Shearson Loeb Rhoades Inc.  
Simon (I.M.) & Co.  
Smith Barney, Harris Upham & Co.,  
Incorporated

Smith (E.H.) Jacobs & Co.\*  
Southwest Securities, Inc.  
Spear, Leeds & Kellogg  
Steichen (R.J.) & Company\*  
Stern & Kennedy  
Sterne, Agee & Leach, Inc.  
Stifel, Nicolaus & Company Incorporated  
Stillman, Maynard & Co.  
Stokes, Hoyt & Co.  
Streicher (J.) & Co.  
Stuart Brothers  
Stubro, Incorporated  
Sutro & Co. Incorporated  
Swiss American Securities Inc.

Thomson McKinnon Securities Inc.  
Thrift Trading, Incorporated\*  
Tompane (A.B.) & Co.  
Tucker, Anthony & Day (R.L.), Inc.  
Tweedy Browne Clearing Corporation

Vincent (Burton J.), Chesley & Co.  
Viner (Edward A.) & Co., Inc.

Wagner, Stott & Co.  
Weber, Hall, Cobb & Caudle Inc.  
Wechsler & Krumholz, Inc.  
Weiss, Peck & Greer  
Wellington & Co.  
Wheat, First Securities, Inc.  
Whitney (H.N.), Goadby & Co.  
Wien (M.S.) & Co., Inc.  
Williams (Jerry), Inc.\*  
Witter (Dean) Reynolds Inc.  
Wood Gundy Incorporated  
Wreszin, Proesser, Romano & Co.

Yamaichi International (America), Inc.

#### Clearing Agencies (6)

Midwest Securities Trust Company  
National Securities Clearing Corporation  
New England Securities Depository Trust  
Company  
Options Clearing Corporation (The)  
Pacific Securities Depository Trust  
Company  
Philadelphia Depository Trust Company

#### DTC Stockholders †

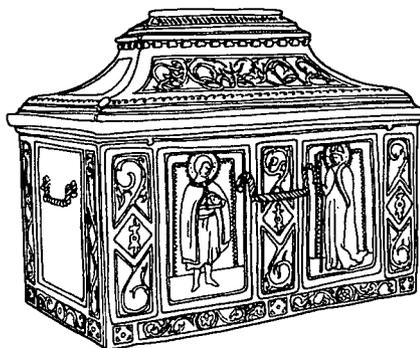
The full list of 1979 DTC stock-  
holders, in order of their holdings,  
is as follows:

New York Stock Exchange, Inc.  
Citibank, N.A.  
Merrill Lynch & Co., Inc.

American Stock Exchange, Inc.  
National Association of Securities  
Dealers, Inc.  
The Chase Manhattan Bank, N.A.  
Bankers Trust Company  
Manufacturers Hanover Trust Company  
The Bank of New York  
Morgan Guaranty Trust Company of  
New York  
Irving Trust Company  
Marine Midland Bank—New York  
Wells Fargo Bank, National Association  
United States Trust Company of New York  
Goldman, Sachs & Co.  
Northwestern National Bank of  
Minneapolis  
Chemical Bank  
Salomon Brothers  
State Street Bank and Trust Company  
A.G. Edwards & Sons, Inc.  
The Citizens and Southern National Bank  
Morgan Stanley & Co. Incorporated  
First & Merchants National Bank  
Lewco Securities Corp.  
Donaldson, Lufkin & Jenrette  
Securities Corporation  
The First Boston Corporation  
Edward A. Viner & Co., Inc.  
The Connecticut Bank and Trust Company  
Shawmut Bank of Boston, N.A.  
Arnhold and S. Bleichroeder, Inc.  
The Equitable Trust Company  
Hartford National Bank and Trust Company  
F. Eberstadt & Co., Inc.  
Wood Gundy Incorporated  
Whitney Goadby Inc.  
Oscar Gruss & Son Incorporated  
Bradford Trust Company  
Alex. Brown & Sons  
First Wall Street Settlement Corporation  
First Jersey National Bank  
Kingsley, Boye & Southwood, Inc.  
Carl H. Pforzheimer & Co.  
La Branche & Co.  
Boettcher & Company  
Prescott, Ball & Turben  
Stillman, Maynard & Co.  
Fagenson & Co., Inc.  
J.F. Nick & Co.  
The First National Bank of Atlanta  
Stock Clearing Corporation  
Mitchel, Schreiber, Watts & Co., Inc.  
Mayer & Schweitzer, Inc.  
Carl Marks & Co., Inc.

#### Depository Facilities(33†)

Atlanta, Georgia  
Citizens and Southern National Bank (The)



This 14th century French chest was designed as a general-purpose depository for small objects of intrinsic or sentimental value.

First National Bank of Atlanta (The)  
*Baltimore, Maryland*  
 First National Bank of Maryland (The)  
*Birmingham, Alabama*  
 First National Bank of Birmingham  
*Boston, Massachusetts*  
 New England Securities Depository  
 Trust Company  
 Shawmut Bank of Boston, N.A.  
 State Street Bank and Trust Company  
*Charlotte, North Carolina*  
 First Union National Bank of  
 North Carolina  
*Cleveland, Ohio*  
 AmeriTrust Company  
*Dallas, Texas*  
 First National Bank of Dallas  
 Republic National Bank of Dallas  
*Denver, Colorado*  
 United Bank of Denver, National  
 Association  
*Hartford, Connecticut*  
 Connecticut Bank and Trust Company  
 (The)  
 Hartford National Bank and Trust  
 Company  
*Houston, Texas*  
 Houston National Bank  
*Indianapolis, Indiana*  
 Merchants National Bank & Trust  
 Company of Indianapolis  
*Jersey City, New Jersey*  
 First Jersey National Bank  
*Los Angeles, California*  
 Security Pacific National Bank  
 Wells Fargo Bank, National  
 Association  
*Louisville, Kentucky*  
 Citizens Fidelity Bank & Trust  
 Company  
 First Kentucky Trust Company (The)  
*Milwaukee, Wisconsin*  
 First Wisconsin Trust Company

*Minneapolis, Minnesota*  
 First National Bank of Minneapolis  
 Northwestern National Bank of  
 Minneapolis  
*Nashville, Tennessee*  
 United American Bank  
*Philadelphia, Pennsylvania*  
 Provident National Bank  
*Pittsburgh, Pennsylvania*  
 Mellon Bank, N.A.  
*Providence, Rhode Island*  
 Industrial National Bank of Rhode  
 Island  
*Richmond, Virginia*  
 First & Merchants National Bank  
*Rochester, New York*  
 Lincoln First Bank of Rochester  
*St. Louis, Missouri*  
 First National Bank in St. Louis  
 Mercantile Trust Company National  
 Association  
*San Francisco, California*  
 Wells Fargo Bank, National  
 Association

### Pledges (101†)

Algemene Bank Nederland N.V., New  
 York Branch  
 Amalgamated Bank of New York (The)  
 American Security and Trust Company,  
 N.A.  
 AmeriTrust Company  
 Arizona Bank (The)  
 Banca Commerciale Italiana, Chicago  
 Branch  
 Banco Urquijo, S.A.—New York Agency  
 Bank Leumi Trust Company of New York

\* NSCC Sponsored Account  
 † As of December 31, 1979



Bank of America National Trust and Savings Association  
 Bank of California N.A. (The)  
 Bank of New York (The)  
 Bank of Nova Scotia (The)  
 Bank of Oklahoma, N.A.  
 Bank of Tokyo Trust Company (The)  
 Bankers Trust Company  
 Barclays Bank International Limited  
 Boatmen's National Bank of St. Louis (The)  
 Bradford Trust Company  
 Brown Brothers Harriman & Co.  
 California First Bank  
 Canadian Imperial Bank of Commerce  
 Central National Bank of Cleveland  
 Chase Manhattan Bank, N.A. (The)  
 Chemical Bank  
 Citibank, N.A.  
 Citizens Fidelity Bank and Trust Company  
 Citizens and Southern National Bank (The)  
 Connecticut Bank and Trust Company (The)  
 Continental Illinois National Bank and Trust Company of Chicago  
 Credit Lyonnais, New York Branch  
 Credito Italiano  
 Crocker National Bank  
 Daiwa Bank Limited (The), New York Agency  
 Detroit Bank & Trust Company (The)  
 Equitable Trust Company (The)  
 European American Bank & Trust Company  
 Fidelity Bank (The)  
 First Jersey National Bank  
 First & Merchants National Bank  
 First National Bank in Dallas  
 First National Bank in St. Louis  
 First National Bank of Arizona  
 First National Bank of Atlanta (The)  
 First National Bank of Chicago  
 First National Bank of Louisville  
 First National Bank of Maryland (The)  
 First National Bank of Minneapolis  
 First National Bank of Oregon  
 First Pennsylvania Bank, N.A.  
 First Union National Bank of North Carolina  
 Fuji Bank and Trust Company (The)  
 Harris Trust and Savings Bank  
 Hartford National Bank and Trust Company  
 Houston National Bank  
 Indiana National Bank  
 Irving Trust Company  
 Israel Discount Bank Limited  
 Lincoln First Bank of Rochester

Lloyds Bank California  
 Manufacturers Hanover Trust Company  
 Manufacturers National Bank of Detroit  
 Marine Midland Bank  
 Maryland National Bank  
 Mellon Bank, N.A.  
 Mercantile-Safe Deposit and Trust Company  
 Mercantile Trust Company National Association  
 Merchants National Bank & Trust Company of Indianapolis  
 Midlantic National Bank  
 Morgan Guaranty Trust Company of New York  
 National Bank of Detroit  
 National Bank of North America  
 National Westminster Bank Limited  
 New England Merchants National Bank  
 North Carolina National Bank  
 Northern Trust Company (The)  
 Northwestern National Bank of Minneapolis  
 Pittsburgh National Bank  
 Provident National Bank  
 Republic National Bank of Dallas  
 Republic National Bank of New York  
 Royal Bank of Canada (The), New York Agency  
 Sanwa Bank Limited (The)  
 Seattle First National Bank  
 Security Pacific National Bank  
 Shawmut Bank of Boston, N.A.  
 State Bank of India—New York Branch  
 State Street Bank and Trust Company  
 Sumitomo Trust & Banking Co., Ltd. (The)  
 Swiss Bank Corporation, New York Branch  
 Swiss Credit Bank  
 Texas Commerce Bank National Association  
 Toledo Trust Company (The)  
 Toronto-Dominion Bank (The)  
 Union Bank of Switzerland, New York Branch  
 Union First National Bank of Washington  
 United Bank of Denver, National Association  
 United California Bank  
 United States Trust Company of New York  
 United Virginia Bank

Wachovia Bank and Trust Company, N.A.  
 Wells Fargo Bank, National Association

### **Banks Reported to be Participating in the Depository on an Indirect Basis (170†)**

#### **Alabama**

Central Bank of Birmingham

#### **Alaska**

Alaska National Bank of the North, Fairbanks  
 Alaska Statebank, Anchorage  
 National Bank of Alaska, Anchorage

#### **Arizona**

Harris Trust of Arizona, Scottsdale  
 Valley National Bank, Phoenix

#### **California**

City National Bank, Beverly Hills  
 Mechanics Bank of Richmond  
 Trust Company of the West, Los Angeles

#### **Colorado**

Central Bank of Denver  
 Colorado National Bank, Denver  
 First National Bank, Colorado Junction  
 First National Bank of Denver (The)

#### **Connecticut**

Citytrust, Bridgeport  
 New England Bank & Trust Company, Enfield  
 Putnam Trust Company of Greenwich  
 State National Bank of Connecticut, Bridgeport  
 Union Trust Company, New Haven  
 Westport Bank & Trust Company

#### **Delaware**

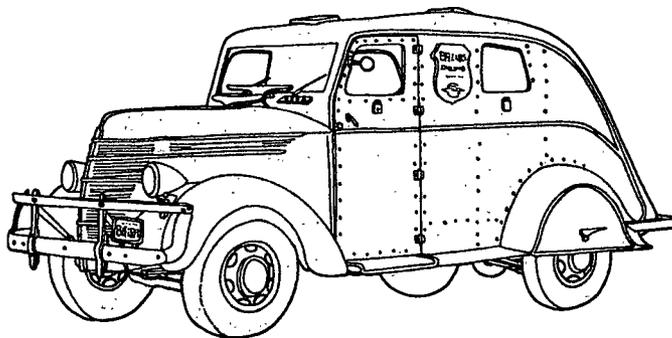
Bank of Delaware, Wilmington  
 Farmers Bank of the State of Delaware, Wilmington  
 Wilmington Trust Company

#### **District of Columbia**

American Security Bank, N.A.  
 National Bank of Washington (The)

#### **Florida**

American Bank & Trust Company, Ft. Lauderdale



By 1939, a distinctly modern look had begun to characterize Brinks' armored vehicles. Models subsequent to the one shown here can no longer be described as "classic," and are therefore too familiar to have been included in this series of drawings.

**Century National Bank of Broward,**  
Ft. Lauderdale

**First Bank & Trust, Boca Raton**  
**First Marine Bank and Trust Company**  
of The Palm Beaches

**First National Bank of Florida, Tampa**  
**First National Bank of Venice**

**Flagship Bank of Tampa**  
**Flagship National Bank of Miami**

**Florida First National Bank of**  
Jacksonville

**Landmark First National Bank**  
of Ft. Lauderdale

**Lee County Bank, Fort Myers**  
**Peoples Bank of Lakeland**

**Royal Trust Company, Miami**  
**Southeast Banks Trust Company,**  
N.A., Miami

**Southwest Banks of Florida**  
**Venice Nokomis Bank & Trust**  
Company, Venice

**Georgia**

**Columbus Bank and Trust Company**  
**National Bank of Georgia, Atlanta**

**Hawaii**

**First Hawaiian Bank, Honolulu**  
**Hawaiian Trust Company, Ltd.,**  
Honolulu

**Idaho**

**Idaho Bank and Trust Company,**  
Pocatello

**Illinois**

**Pioneer Bank and Trust Company,**  
Chicago  
**Springfield Marine Bank**

**Indiana**

**Anderson Banking Company, Anderson**  
**Citizens National Bank of Evansville**

**First Bank and Trust Company of**  
South Bend

**First National Bank of Richmond (The)**

**St. Joseph Bank and Trust Company,**  
South Bend

**Iowa**

**Iowa—Des Moines National Bank,**  
Des Moines  
**Merchants National Bank of Cedar**  
Rapids (The)

**Kansas**

**Union National Bank of Wichita**

**Louisiana**

**Hibernia National Bank in New**  
Orleans (The)

**Maine**

**Canal Bank, Portland**  
**Casco Bank & Trust Company,**  
Portland

**Massachusetts**

**Arlington Trust Company, Lawrence**  
**Berkshire Bank and Trust Company,**  
Pittsfield

**B.M.C. Durfee Trust Co., Fall River**  
**Cambridge Trust Company**

**First Agricultural Bank, Pittsfield**  
**Guaranty Bank and Trust Company,**  
Worcester

**Mechanics National Bank, Worcester**  
**Pacific National Bank of Nantucket**

**Plymouth Home National Bank,**  
Brockton

**South Shore National Bank, Quincy**  
**Union National Bank, Lowell**

**Michigan**

**American National Bank and Trust**  
Company of Michigan, Kalamazoo

**Ann Arbor Trust Company**  
**Commercial and Savings Bank of**

St. Clair County, St. Clair  
**Detroit Bank & Trust**

**First National Bank & Trust Company**  
of Michigan, Kalamazoo  
**National Bank of Jackson**

† As of December 31, 1979



**Minnesota**

IDS Benefit Trust Company,  
Minneapolis  
Northwestern National Bank of  
St. Paul

**Mississippi**

First National Bank of Jackson

**Missouri**

Guaranty Trust Company of Missouri  
(The), Dayton  
St. Louis Union Trust Company

**Montana**

Northwestern Bank of Helena

**Nebraska**

First National Bank and Trust  
Company of Lincoln  
First Northwestern Trust Company of  
Nebraska, Omaha

**Nevada**

First National Bank of Nevada, Reno

**New Jersey**

Citizens First National Bank of  
Ridgewood  
City Trust Services National  
Association, Elizabeth  
First National State Bank of New Jersey,  
Newark  
First National Bank of New Jersey,  
Totowa  
First National Bank of Princeton (The)  
New Jersey Bank, N.A., Paterson  
New Jersey National Bank, Trenton  
Somerset Trust Company, Somerville  
Summit and Elizabeth Trust Company,  
Summit  
United Counties Trust, Elizabeth  
United Jersey Bank, Hackensack

**New Mexico**

Bank of New Mexico, Albuquerque

**New York**

Chemung Canal Trust Company,  
Elmira  
Empire National Bank, Middletown  
Key Trust Company, Albany  
Savings Bank Trust Company  
St. Lawrence National Bank (The),  
Canton  
Tompkins County Trust Company,  
Ithaca

**North Carolina**

Bank of North Carolina N.A.,  
Jacksonville  
Carolina First National Bank,  
Lincolnton  
Central Carolina Bank and Trust  
Company, Durham  
Independence National Bank, Gastonia  
Southern National Bank of North  
Carolina, Lumberton  
United Carolina Bank, Monroe  
United Carolina Bank, Whiteville

**North Dakota**

Bank of North Dakota, Bismarck

**Ohio**

Bank One Trust Company, Columbus  
First National Bank of Toledo  
Huntington National Bank of  
Columbus (The)  
Second National Bank of Warren (The)  
Third National Bank & Trust  
Company (The), Dayton

**Oklahoma**

F & M Bank & Trust Company (The),  
Tulsa  
First National Bank and Trust  
Company of Oklahoma City (The)  
Liberty National Bank and Trust  
Company of Oklahoma City (The)  
Utica National Bank & Trust  
Company, Tulsa

**Oregon**

Oregon Bank (The), Portland

**Pennsylvania**

American Bank and Trust Company of  
Pennsylvania, Reading  
Bank of Pennsylvania, Reading  
Commonwealth National Bank (The),  
Harrisburg  
Dauphin Deposit Bank & Trust  
Company, Harrisburg  
Equibank N.A., Pittsburgh  
First Seneca Bank and Trust Company,  
Oil City  
First Valley National Bank, Bethlehem  
Frankford Trust Company, Philadelphia  
Hamilton Bank, Lancaster  
Marine National Bank, Erie  
Northeastern Bank of Pennsylvania  
Northern Central Bank, Williamsport  
Security Bank & Trust Company,  
Stroudsburg  
Security-Peoples Trust Company, Erie

Southeast National Bank of  
Pennsylvania, West Chester  
Third National Bank and Trust  
Company of Scranton  
United Penn Bank, Wilkes-Barre  
Union Bank and Trust Company of  
Eastern Pennsylvania, Bethlehem  
Union National Bank of Pittsburgh  
(The)

**Rhode Island**

Old Stone Bank, Providence  
Washington Trust Company (The),  
Westerly

**South Carolina**

Bankers Trust of South Carolina,  
Columbia  
First National Bank of South Carolina,  
Columbia  
South Carolina National Bank,  
Columbia  
Southern Bank and Trust Company,  
Greenville

**Tennessee**

Union Planters National Bank of  
Memphis

**Texas**

Bank of the Southwest, Houston  
First City Bank of Dallas  
First City National Bank of Houston  
First International Bank in Houston,  
N.A.  
National Bank of Amarillo (The)  
First National Bank, San Antonio  
Houston National Bank  
Mercantile National Bank at Dallas  
Republic National Bank of Dallas  
Southern National Bank of Houston

**Utah**

Tracy-Collins Bank and Trust  
Company, Salt Lake City

**Vermont**

Chittenden Trust Company, Burlington  
First Vermont Bank and Trust  
Company, Bennington

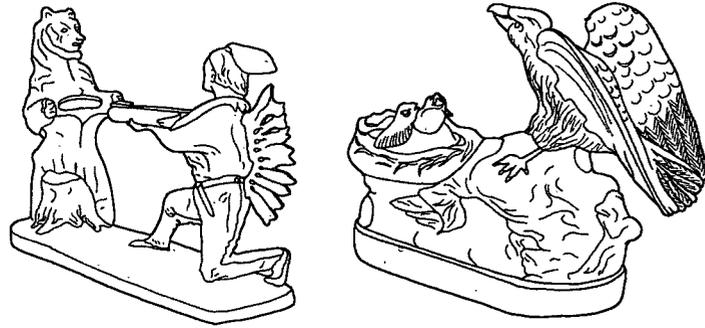
**Virginia**

Bank of Virginia Trust Company  
National Bank of Fairfax (The)  
Virginia National Bank, Norfolk

**Washington**

Bellingham National Bank (The)

Throughout the 19th century, children all over the world were admonished to practice thrift. One fact distinguished American children from children in most other places, however; in the United States, prosperity was widespread enough so that many children had something to be thrifty with. To reinforce the value of pennies and nickels, and thus the value of saving them, children's "piggy banks" embodied elaborate games designed to beguile young depositors into a life-long dedication to thrift.



The hunter shoots a coin into the bear, and a mother eagle drops a coin into the nest as her two eaglets chirp encouragement.

Old National Bank of Washington,  
Spokane  
Pacific National Bank of Washington,  
Seattle  
Seattle Trust & Savings Bank

**Wisconsin**  
Citizens Trust Company (The),  
Sheboygan  
First National Bank and Trust  
Company of Racine  
Merchants & Savings Bank, Janesville  
Valley Trust Company, Appleton

### Investment Companies Reported to be Using Depository Services (76†)

(Listed by Custodian Bank)

#### **BANK OF NEW YORK (THE)**

Adams Express Company  
Alpha Fund, Inc.  
Charter Fund, Inc.  
Drexel Burnham Fund (The)  
Financial Bond Shares, Inc.  
Financial Dynamics Fund, Inc.  
Financial Industrial Fund,  
Inc.  
Financial Industrial Income  
Fund, Inc.  
Fundamerica of Japan, Inc.  
General Electric S & S Program  
Mutual Fund  
Johnston Capital Appreciation  
Fund  
Merrill Lynch Capital Fund, Inc.  
Merrill Lynch Special Value Fund  
National Securities Balanced  
Fund  
National Securities Bond Fund  
National Securities  
Dividend Fund  
National Securities Growth Fund

National Securities Income Fund  
National Securities  
Preferred Fund  
National Securities Stock Fund  
Petroleum & Resources  
Corporation  
Unified Accumulation Fund  
Unified Growth Fund  
Unified Income Fund  
Unified Mutual Shares

#### **CHASE MANHATTAN BANK, N.A. (THE)**

Growth Fund of America  
Income Fund of America  
RCM Growth Equity Fund

#### **FIRST JERSEY NATIONAL BANK**

Merrill Lynch Equi-Bond Fund,  
Inc.

#### **FIRST NATIONAL BANK OF BOSTON (THE)**

Beacon Growth Fund  
Colonial Fund (The)  
Colonial Growth Shares  
Colonial Option Income Fund

#### **HARTFORD NATIONAL BANK AND TRUST COMPANY**

Value Line Fund, Inc. (The)  
Value Line Income Fund, Inc.  
(The)  
Value Line Leveraged Growth  
Investors, Inc.  
Value Line Special Situations  
Fund, Inc. (The)

† As of December 31, 1979



**NEW ENGLAND  
MERCHANTS NATIONAL  
BANK**

American Dual Vest Fund  
Tudor Hedge Fund

**NORTHWESTERN NATIONAL  
BANK OF  
MINNEAPOLIS**

IDS Growth Fund, Inc.  
IDS Progressive Fund, Inc.  
Investors Stock Fund, Inc.

**RIGGS NATIONAL BANK  
OF WASHINGTON, D.C. (THE)**

Aetna Income Shares, Inc.  
Aetna Variable Encore Fund, Inc.  
Aetna Variable Fund, Inc.

**SHAWMUT BANK  
OF BOSTON, N.A.**

Directors Capital Fund, Inc.  
Gateway Option Income Fund

**STATE STREET  
BANK & TRUST COMPANY**

Explorer Fund, Inc.  
Federated Option Income Fund,  
Inc.  
First Index Investment Trust  
Ivest Fund, Inc.  
Massachusetts Capital Development  
Fund, Inc.  
Massachusetts Financial Bond  
Fund, Inc.  
Massachusetts Financial  
Development Fund, Inc.  
Massachusetts Financial High  
Income Trust  
Massachusetts Income Development  
Fund, Inc.  
Massachusetts Investors Growth  
Stock Fund, Inc.  
Massachusetts Investors Trust  
Morgan (W.L.) Growth Fund, Inc.  
Price (T. Rowe) Growth Stock  
Fund, Inc.  
Price (Rowe) New Era Fund, Inc.  
Price (Rowe) New Horizons Fund, Inc.  
Price (Rowe) New Income Fund, Inc.  
Putnam Option Income Trust  
Qualified Dividend Portfolio I  
Qualified Dividend Portfolio II  
Scudder Common Stock Fund  
TDP & L Investment Account A  
Wellesley Income Fund, Inc.

Wellington Fund, Inc.  
Westminster Bond Fund, Inc.  
Westminster High Yield Fund

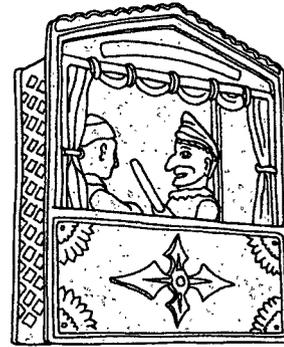
**UNITED BANK  
OF DENVER, N.A.**

Bank Stock Fund, Inc.  
Janus Fund, Inc.  
One Hundred Fund, Inc. (The)  
One Hundred and One Fund, Inc.  
(The)

**Institutions Participating  
Fully in the Institutional  
Delivery (ID) System (234†)**

Aetna Income Shares, Inc.  
Aetna Life Insurance and Annuity  
Company  
Aetna Variable Encore Fund, Inc.  
Aetna Variable Fund, Inc.  
Akzona Pension Fund  
Alaska National Bank of the North  
Alaska Statebank  
American Bank and Trust Co. of  
Pa. (Reading, Pennsylvania)  
American Bank & Trust Company  
(Monroe, North Carolina)  
American National Bank & Trust Co.  
(Fort Lauderdale, Florida)  
American Security Bank, N.A.  
(Washington, D.C.)  
Amoskeag National Bank and Trust  
Company (Manchester,  
New Hampshire)  
Anderson Banking Company  
Bank in Liechtenstein (Vaduz,  
Liechtenstein)  
Bank of Delaware  
Bank of New York (The)  
Bank of Pennsylvania  
Bank of Tokyo Trust Company (The)  
Bank of Virginia Trust Company  
Bank Von Ernst & Cie.  
(Berne, Switzerland)  
Bankers Trust Company (Trust  
Department)  
Bankers Trust Company (Directed  
Accounts)  
Bankers Trust Company of South Carolina  
Bankhaus Marcard (Hamburg, West  
Germany)  
Banque de L'Union Européenne  
(Paris, France)  
Banque Gutzwiller, Kurz, Bungener S.A.  
(Geneva, Switzerland)

Banque Internationale à Luxembourg  
(Luxembourg)  
Banque Louis-Dreyfus (Paris, France)  
Batterymarch Financial Management  
Corporation  
Bellingham National Bank (The)  
(Bellingham, Washington)  
Boston Safe Deposit and Trust Company  
Bounty Management Corporation  
Breisach Pinschoff Schoeller (Vienna,  
Austria)  
Bullock Fund  
Cambridge Trust Company  
Canadian Fund  
Carolina First National Bank  
(Lincolnton, North Carolina)  
Central Fidelity Bank, N.A.  
(Richmond, Virginia)  
Central Bank of Denver  
Century Capital Associates  
Chase Manhattan Bank, N.A. (The)  
Chase Manhattan Bank (Switzerland)  
Chase Manhattan Index Fund  
Citibank, N.A.  
Citizens & Southern National Bank  
(Atlanta, Georgia)  
Citizens & Southern National Bank of  
South Carolina  
Citizens Fidelity Bank & Trust Company  
(Louisville, Kentucky)  
Citizens First National Bank (Ridgewood,  
New Jersey)  
Citytrust (Bridgeport, Connecticut)  
Colorado National Bank (Trust  
Department)  
Colorado National Bank (Directed  
Accounts)  
Conservet Management Company  
Cumberland Advisors, Pty.  
Daiwa Bank Limited (The) (New York)  
Den Norske Creditbank  
Deseret Trust Company  
Dividend Shares Inc.  
Eagle Management and Trust Company  
Effectenbank-Warburg Aktiengesellschaft  
(Frankfurt, West Germany)  
Endowment Management & Research  
Corp.  
Equibank, N.A.  
Equitable Life Assurance Society of the  
United States  
Equitable Trust Company  
(Baltimore, Maryland)  
Exchange Bank & Trust Company of  
Florida  
Farmers Bank of the State of Delaware  
Fidelity Bank Investment Advisory Service  
Fidelity Bank of Pennsylvania  
Fidelity Union Trust Company (Newark,  
New Jersey)



The dog barks when the little girl feeds it a coin, and domestic strife erupts at the drop of a penny.

First Bank and Trust Company of Boca Raton, N.A. (Florida)  
 First City Bank of Dallas  
 First-City National Bank of Binghamton (New York)  
 First Index Investment Trust, Inc.  
 First International Bank in Houston  
 First Kentucky Trust Company  
 First & Merchants National Bank (Richmond, Virginia)  
 First National Bank and Trust Company of Oklahoma City (The)  
 First National Bank and Trust of Racine (Wisconsin)  
 First National Bank in Dallas  
 First National Bank in Palm Beach  
 First National Bank of Birmingham (Alabama)  
 First National Bank of Boston (The)  
 First National Bank of Denver (The)  
 First National Bank of Florida  
 First National Bank of Minneapolis (Minnesota)  
 First National Bank of New Jersey  
 First National Bank of Richmond (The) (Indiana)  
 First National Bank of Venice (Florida)  
 First Union National Bank of North Carolina (Charlotte, North Carolina)  
 Fisher Controls Company  
 Flagship Bank of Tampa  
 FMR Investment Management Services, Inc.  
 Hartford National Bank and Trust Company  
 Hartford Steam Boiler Inspection and Insurance Company  
 Hibernia National Bank (New Orleans, Louisiana)  
 Hill Samuel & Co. Limited (London, England)  
 Houston National Bank  
 IDS Growth Fund, Inc.  
 IDS Progressive Fund Inc.  
 Indiana National Bank (Indianapolis, Indiana)

Industrial National Bank of Rhode Island  
 Investors Stock Fund Inc.  
 Iowa-Des Moines National Bank  
 Irving Trust Company  
 Ivest Fund Inc.  
 Jennison Associates  
 John Hancock Mutual Life Insurance Company  
 Lee County Bank (Fort Myers, Florida)  
 Lincoln First Bank of Rochester  
 Manufacturers Hanover Trust Company  
 Manufacturers National Bank of Detroit  
 Marine Midland Bank  
 M&I Marshall & Ilsley Bank  
 Massachusetts Capital Development Fund, Inc.  
 Massachusetts Financial Bond Fund  
 Massachusetts Financial Development Fund  
 Massachusetts Financial High Income Trust  
 Massachusetts Financial Services Company  
 Massachusetts Income Development Fund, Inc.  
 Massachusetts Investors Growth Stock Fund, Inc.  
 Massachusetts Investors Trust  
 Massachusetts Mutual Life Insurance Company  
 Mechanics Bank of Richmond (California)  
 Mellon Bank, N.A.  
 Mercantile-Safe Deposit & Trust Company (Baltimore, Maryland)  
 Mercantile-Trust Company, N.A. (St. Louis, Missouri)  
 Merchants & Savings Bank (Janesville, Wisconsin)  
 Merchants National Bank and Trust Company (of Indianapolis)  
 Merchants National Bank and Trust Company (Security Custody Department)

† As of December 31, 1979



Monsanto Savings & Investment Plan  
 Monthly Income Shares  
 Morgan (W.L.) Growth Fund, Inc.  
 Morgan Guaranty Trust Company  
 Morgan Guaranty Trust Company  
 (Trust and Investment Division)  
 Nation-Wide Securities Co., Inc.  
 National Bank of Alaska  
 National Bank of Fairfax (The) (Burke,  
 Virginia)  
 National Bank of Westchester  
 (Rochester, New York)  
 National Central Bank (Lancaster,  
 Pennsylvania)  
 New England Mutual Life Insurance  
 Company  
 New Jersey National Bank  
 (Trenton, New Jersey)  
 New York Venture Fund, Inc.  
 Nomura Securities International, Inc.  
 North Carolina National Bank  
 (Charlotte, North Carolina)  
 Northeastern Bank of Pennsylvania  
 (Scranton, Pennsylvania)  
 Northwestern National Bank of  
 Minneapolis  
 Pacific National Bank of Nantucket  
 (Massachusetts)  
 Paul Revere Equity Management  
 Company (The)  
 Peoples Bank of Lakeland (Florida)  
 Pictet & Cie.  
 Pierson, Heldring & Pierson N.V.  
 (Amsterdam, The Netherlands)  
 Pioneer Bank & Trust Co.  
 Plymouth Home National Bank  
 (Brockton, Massachusetts)  
 Premco-West Coast  
 Prudential Insurance Company of  
 America  
 Qualified Dividend Portfolio I  
 Qualified Dividend Portfolio II  
 RCM Growth Equity Fund, Inc.  
 Republic National Bank of Dallas  
 Rothschild Bank, AG. (Zurich,  
 Switzerland)  
 Second National Bank of Warren (The)  
 (Ohio)  
 Security Bank and Trust Company  
 (Stroudsburg, Pennsylvania)  
 Security Trust Company of Rochester  
 Shawmut Bank of Boston, N.A.  
 Southeast Banks Trust Company  
 (Miami, Florida)  
 Southeast National Bank of Pennsylvania  
 (The) (West Chester, Pennsylvania)  
 Southern Bank & Trust Company  
 (Greenville, South Carolina)  
 Southern Methodist University  
 Endowment Fund  
 Southern National Bank of North  
 Carolina (Lumberton, North Carolina)  
 St. Louis Union Trust Company

State National Bank of Connecticut  
 State Street Bank and Trust Company  
 (Trust Division)  
 State Street Research & Management  
 Company  
 Strauss Turnbull & Co. (London,  
 England)  
 Summit & Elizabeth Trust Co. (New  
 Jersey)  
 Swiss Bank Corporation (New York  
 Branch)  
 Teachers Insurance & Annuity  
 Association  
 The Citizens Trust Company  
 (Sheboygan, Wisconsin)  
 The National Bank of Georgia  
 The Putnam Advisory Company, Inc.  
 Third National Bank & Trust Company  
 (Dayton, Ohio)  
 Third National Bank and Trust Company  
 of Scranton, Pennsylvania  
 Tracy-Collins Bank and Trust  
 (Salt Lake City, Utah)  
 Treasurer of the State of North Carolina  
 Trust Company of the West (Los  
 Angeles, California)  
 Union Bank and Trust Company of  
 Eastern Pennsylvania  
 Union Bank of Switzerland (Basle)  
 Union Bank of Switzerland (Berne)  
 Union Bank of Switzerland (Chiasso)  
 Union Bank of Switzerland (Geneva)  
 Union Bank of Switzerland (Lausanne)  
 Union Bank of Switzerland (Lugano)  
 Union Bank of Switzerland (Zurich)  
 Union National of Wichita  
 Union Trust Company (New Haven,  
 Connecticut)  
 United Bank of Denver, N.A.  
 United Jersey Bank  
 United States Trust Company of Boston  
 United States Trust Company of New  
 York  
 United Virginia Bank  
 University of Rochester  
 Utica National Bank & Trust  
 Company (Tulsa, Oklahoma)  
 Valley Trust Company (Phoenix,  
 Arizona)  
 Value Line Fund, Inc.  
 Value Line Income Fund, Inc.  
 Value Line Leverage Growth Fund, Inc.  
 Value Line Special Situations  
 Fund, Inc.  
 Venice Nokomis Bank & Trust Co.  
 (Venice, Florida)  
 Virginia National Bank  
 Vontobel (J.) and Co. Bankiers  
 (Zurich, Switzerland)  
 Wachovia Bank and Trust Company,  
 N.A.  
 Washington State Accident Fund

Washington State Accident Reserve Fund  
 Washington State Agriculture College  
 Permanent Fund  
 Washington State Employees Retirement  
 Fund  
 Washington State Judicial Retirement  
 Fund  
 Washington State Law Enforcement  
 Officers and Fire Fighters Fund  
 Washington State Medical Aid Fund  
 Washington State Normal School  
 Permanent Fund  
 Washington State Patrol Retirement  
 Fund  
 Washington State Permanent Common  
 School Fund  
 Washington State Scientific School  
 Permanent Fund  
 Washington State Teachers Pension  
 Reserve Fund  
 Washington State Teachers Retirement  
 Fund  
 Washington State University Permanent  
 Fund  
 Washington State Volunteer Firemen's  
 Relief and Pension Fund  
 Wellesley Fund Inc.  
 Wellington Fund Inc.  
 Wells Fargo Advisors  
 Wells Fargo Bank, N.A.  
 Wells Fargo Institutional Trust-Directed  
 Westminster Bond Fund Inc.  
 Westminster High Yield Fund  
 Westport Bank & Trust Co. (The)  
 (Westport, Connecticut)  
 Windsor Fund, Inc.

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