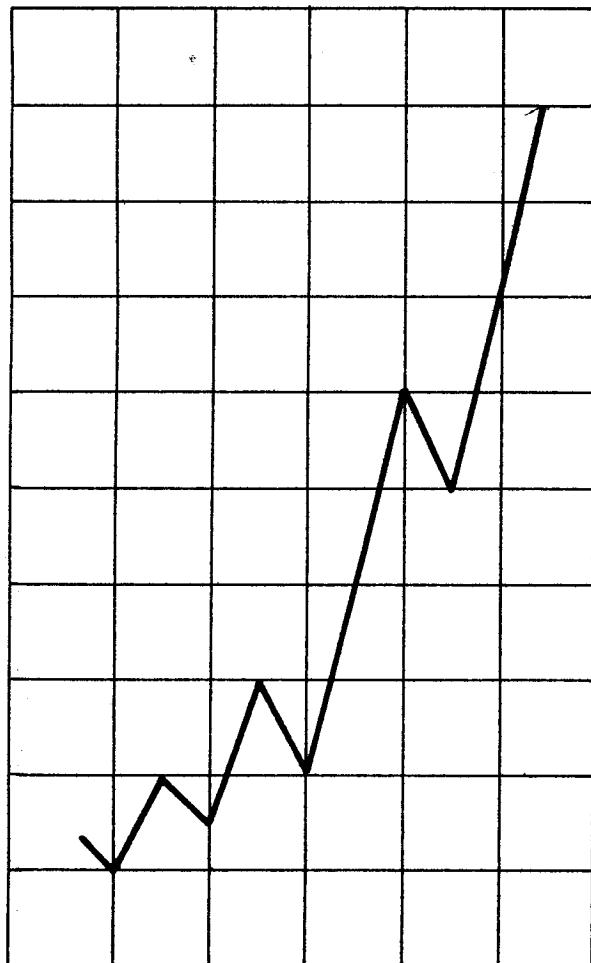


THE SPECULATIVE MERITS OF COMMON STOCK WARRANTS



by Sidney Fried

Introduction:

December 2, 2013

I am pleased to share with you this valuable and classic investment publication.

Of all the information previously written on stock warrants, my mentor and guru is Sidney Fried and his original work, "The Speculative Merits of Common Stock Warrants", copyrighted in 1961 which includes his writings as early as the 1940s.

The following is the original version of Sidney Fried's book and while the examples are now outdated, the message and the methodology is clearly the same today.

There have many other books written on stock warrants but they pale in comparison to the creativity and simplicity of Sidney's writings. Stock warrants are not complicated but investors, unfortunately, still seem to think so.

Sidney addresses his concern on page 2:

"... with potential profits and potential losses so great it is a source of wonder that so little understanding of the nature of common stock warrants exists not only among the investing 'public', who might be forgiven this sin, but even among the many 'professionals' of the business upon whom the 'public' depends for information and guidance."

Today's investors, newsletter writers and advisors, 'still don't get it' and I personally share the views and frustration of Sidney over five decades later.

The opportunities utilizing stock warrants whether as investments, trading or hedging strategies are unique but oversight of this strategic investment vehicle is stunning and outright shameful.

In my service, www.CommonStockWarrants.com, I follow the teachings of the master, Sidney Fried, as there is absolutely no reason over five decades later to alter his views and methodology. I am in possession of all of the books written by Sidney Fried and regret that I did not have the opportunity to meet with him and share his knowledge and many stories of stock warrants before his passing in 1990.

My intention is to publish my own works, with recent updates and examples in the coming year but for now....

Wake up investors and smell the opportunities and enjoy this classic publication.

Dudley Pierce Baker
Founder – Editor
www.CommonStockWarrants.com

The Author, Sidney Fried, is Editor of the following Investment Services :

The R.H.M. Warrant & Low-Price Stock SURVEY

The R.H.M. Convertible SURVEY



1961 R.H.M. Associates

Designed By Lila Fried

B. Lahr
Title 1967

THE SPECULATIVE MERITS.
OF COMMON STOCK
WARRANTS

BY SIDNEY FRIED

by Sidney Fried

Financial Writer, Analyst



Preface

In 1942 Tri-Continental Corp. warrants were selling for 3¢ a warrant. Four years later, in 1946, these warrants were selling at 5-5/8. A \$400 investment in Tri-Continental Corp. warrants in 1942 was worth \$74,812 in 1946. By 1958, these same warrants had sold up as high as \$30 and the original \$400 investment would have been worth almost \$400,000!

In 1942 R.K.O. warrants were selling for 6-1/4¢ a warrant. Four years later, in 1946, these warrants were selling for \$13. A \$400 investment in R.K.O. warrants in 1942 was worth \$83,200 just four years later.

In 1948 Hoffman Radio warrants were selling for 5¢ a warrant. Two years later, in 1950, these same warrants were selling for \$25. A mere \$100 investment in Hoffman Radio warrants in 1948 was worth \$50,000 two years later!

This story, of course, has two sides. In 1945, Universal Pictures warrants were each worth about \$39. Two years later the same warrants were selling for \$1.50. A \$25,000 investment in Universal Pictures warrants in 1945 was worth only \$961 just two years later. (And by 1955 these same Universal Pictures warrants had run up the ladder again from the \$1.50 mark to \$21 in 1955, shortly before expiration.)

To consider a more current situation, we shall in later pages be telling the complete story of the General Tire & Rubber warrants as a most instructive example of how to select warrant opportunities for maximum profit opportunity and minimum risk. In August 1956 there were two classes of General Tire & Rubber warrants outstanding, one called the "'\$60'" warrants and the other the "'\$70'" warrants, referring to the price at which they were exercisable. In August 1956 the common stock was selling at 50 while the \$60 warrants were selling at 7.25 and the \$70 warrants at 4.50.

What has happened to General Tire common and the two classes of warrants as we write this preface? Between August 1956 - December 1959, with the common price adjusted for intervening stock dividends:

General Tire common went from	50 to 280	up	460%
General Tire \$60 warrants went from	7.25 to 215	up	2,865%
General Tire \$70 warrants went from	4.50 to 205	up	4,455%

The two warrants had advanced more than 6 and 9 times as fast as the common stock.

* * *

The above examples should serve to emphasize what is really an indisputable fact -- that common stock warrants turn in the most spectacular performance of any group of securities which could be mentioned. To answer the question implied in the title of this work, the speculative potentialities of common stock warrants are enormous.

With potential profits and potential losses so great it is a source of wonder that so little understanding of the nature of common stock warrants exists not only among the investing 'public', who might be forgiven this sin, but even among the many 'professionals' of the business upon whom the 'public' depends for information and guidance.

In the course of some years activities in the securities markets, which has included almost every phase of that business, nothing has so impressed this writer as the lack of information, the lack of understanding, which besets almost every investor, large as well as small, not only about warrants, but about every other phase of securities. It is truly incredible when you consider how much there is to know about securities and their markets and how much is known by those who come to it with their accumulated savings and so little else except, perhaps, hope.

This lack of understanding extends even to the most basic concepts of the stock market, without which it would seem almost impossible even to begin -- and yet the basic concepts are neither difficult of access nor of comprehension. On the contrary, they are easily absorbed, quite fascinating to anyone with an awakened interest in the stock market, and enormously helpful. You will not, of course, find the road to easy riches in these pages, simply because no such road exists for anyone. 'Incredible' as it may seem (and there really isn't the slightest reason why it should seem incredible) the professionals of Wall Street, men who have spent a lifetime in those famed canyons of finance, find it a ceaseless struggle, and never a simple or easy one, to draw profits from the securities market. Why, then, should it be easy for non-professionals, and why should anyone delude himself that an easy road exists?

During the earlier part of his 'apprenticeship', this writer had the good fortune to benefit for several years from the wise counsel of one of the shrewdest professionals in the business. On one occasion, he laughingly countered my expressed amazement at the hazards of the stock market even for experienced professionals, with an excellent statement. "In the kingdom of the blind" he said, "the one-eyed man is king." In the period that followed I was to see more and more the excellence of that observation. The professionals ran into the usual difficulties and made their share of mistakes but they at least knew the rules -- they had one eye open.

Now, it is an unfortunate but accurate statement that the vast majority of investors come close to being totally blind, and this study is directed towards the investor who wishes to open one eye, to take a few tentative steps towards becoming "a one-eyed man in the kingdom of the blind" in at least one important aspect of the stock market.

Let the reader absorb the principles of speculation in common stock warrants which follow these introductory words. The comprehensive list of current warrants at the close of this study is meant to carry on from the last page -- to take us from the realm of theory into today's market where an unprecedented outpouring of new long-term warrants -- Sheraton Corp., Mack Trucks, General Tire & Rubber, Kerr-McGee, Molybdenum Corp. of America, Sperry-Rand, Glenn L. Martin, Symington-Wayne, to name some -- has created, and will create for years to come, many, many opportunities. The pages which follow are meant to provide you with a base of understanding so that you may profit from the common stock warrant. Read these pages with due care and they will reward you in the years ahead.

* * *

Author's Note

The reader will, we are sure, be interested in two questions:

- (1) How did "The Speculative Merits of Common Stock Warrants" come to be written?
- (2) How is it that in the pages which follow there are chapters written in 1949, 1951, 1956 and 1958?

(1) How did this study come to be written?

In 1949 this writer was recommending to his then clients in the brokerage business, the purchase of a certain security -- Selected Industries warrants. The warrants were selling as low as 30¢ and we felt them to be an outstanding speculative purchase. There was only one difficulty. The above advice to each client to 'buy' was in each case followed by a distinct pause, and then an invariable, and we must admit, logical, question -- What is a warrant? Unfortunately this is not a question which can be quickly and satisfactorily answered in the course of a hurried telephone conversation, and in self-defense we turned to the typewriter to answer the question: What is a warrant?

What good is a mere definition without some historical examples? How can you help discussing other existing warrants while you are writing and pointing out why one is a better opportunity than another. And if you are discussing Selected Industries warrants, Selected Industries being a highly-leveraged investment trust, and since several other then interesting warrants were of investment trusts, how could you fail to describe, even if quickly, what is an investment trust, and what is leverage, and how do both factors affect their respective warrants?

The reader has surely guessed the outcome. What was meant to be a short memo to clients became a small book instead. We appended a title which appealed to us -- The Speculative Merits of Common Stock Warrants -- and by an inexpensive method of reproduction produced 200 copies for distribution to clients and to some fellow professionals in the 'Street'. Surprisingly, word got around Wall Street (where there are few secrets) about this little book on 'warrants', and requests came in from more friends and professionals associates, and then from their friends. A new and larger edition was published -- suggestions made and followed to make the book available to a larger audience by advertising it in the pages of our financial journals -- and the book has since been through a number of revised editions and has sold a considerable number of copies.

The R.H.M. Warrant & Low-Price Stock SURVEY

One of the features of the sale of this book has been the high percentage of its professional readers, including almost all investment banking houses, brokerage firms and corporation officials responsible for financial management. This writer believes that it was the sale of the book among these groups that produced a most surprising and accelerating issuance of new warrants as such advisers to corporations were alerted to the real flexibility and applicability of the common stock warrant to many companies' capital structure. The increasing number of warrants being actively traded led to many suggestions by readers, both in the professional field and among investors, that we establish an investment advisory service, dealing specifically with the common stock warrant.

This was done in April 1952 and at the time these words are being written, in

January 1959, the past 6-1/2 years have seen a total of well over 1,000 pages written on the subjects of the common stock warrant and, the allied interest of this writer, the low-price stock. Thus, there will be many examples in the pages following which will not be merely theoretical, but which will be drawn from the actual recommendations of our warrant SURVEY during the past years. The purpose of this study is two-fold. (1) it is a complete, and still the only comprehensive work on the common stock warrant, so that by the time you finish it you should be well equipped to consider the numerous opportunities in the growing warrant field in today's market; (2) it is an introduction to our R.H.M. Warrant & Low-Price Stock SURVEY, so that you may consider its applicability to your own needs if you feel that our methods of approach and analysis, as displayed in these pages, will prove helpful to you in considering warrant opportunities.

The Second Question (2) How is that in the pages which follow there are chapters written in 1949, 1951, 1956 and 1958?

"The Speculative Merits of Common Stock Warrants was originally written in 1949 and there have been three basic revisions since, in 1951, 1956 and at this writing. New material and current examples have been presented in each revised edition, but the writer has felt it quite inadvisable to drop previous material simply because a new year had come upon the scene. The examples we use illustrate principles, and the principles do not change. Our Alleghany Corp. warrant example may use the market developments of 1953-1955 for purposes of explanation, but the principles explained are perfectly applicable to the new Glenn L. Martin warrants which began trading recently, or the Kerr-McGee Oil Industries warrants, which began trading earlier in 1958. Our explanation of short-selling of warrants may have to do with the 1946-1948 period, but is applicable to any developing market top and all warrants that are trading at that time. Everything you read in these pages, then, is applicable to the complete roster of warrants in today's market, for more than in any other sector of the securities market, it is mathematics and logic which governs the creation of warrant opportunities as you shall soon see. And principles derived from mathematics and logic must remain essentially the same for the warrants which were trading in past years, and just as much the same for warrants trading in today's market.

Postscript

This study on warrants originated so that we could explain to our then brokerage clients why they should buy Selected Industries warrants at 30¢ in 1949. It may provide incentive for you, today's reader, to know that Selected Industries was merged into Tri-Continental Corporation in 1950 and each Selected Industries warrant was exchanged for 1/5th of a Tri-Continental Corp. warrant, which reached 30 in 1958. Some of our old friends who bought the Selected Industries warrant, and are still holding the Tri-Continental Corp. warrant, find that their original 30¢ investment is now worth \$6, and has grown 20 times in ten years. Which demonstrates why, in 1949, we were explaining -- "The Speculative Merits of Common Stock Warrants"!

Sidney Fried

What Is A Warrant?

In dealing with common stock warrants we are approaching as near as one ever gets, in the securities field, to a logical, almost mathematical approach to value and price fluctuations. The logic of numbers is generally blithely ignored by the market, to the confusion and distress of analysts, and that is why the stock market may be going up when business news looks bad, and going down when there is not a cloud in the economic skies.

There are words to explain all this -- the market is always 'discounting' and is supposed to be six months to a year ahead or behind actual business conditions -- but the timing is so hazy and haphazard that one can only view it as exceedingly remote from both logic and mathematical simplicity.

It is because of the above that it is quite interesting, and somewhat heartening, to discover that there exists a relationship between the common stock and the warrants of a corporation amenable to logic, and that when we study this relationship we can draw certain conclusions which have a fair chance of standing up in practice.

Actually, as the writer intends to illustrate in this booklet, the speculative potentialities of common stock warrants are enormous, and the extent to which good sense can be applied in dealing with them is wider possibly than in any other aspect of the securities market.

Obviously the first question which must be answered is -- just what is a warrant? As the initial part of the answer it must be stated that warrants are issued by corporations themselves and are an integral part of the capitalization of a company. These warrants are certificates which confer upon the holder the privilege of exchanging them for common stock of the company in a certain ratio, at a stated price, and within a stated period of time, or with no time limit at all.

For example, the Alleghany Corporation has issued warrants giving the holders the right to buy Alleghany common from the company itself at \$3.75 per share at any time, these warrants being 'perpetual'. We shall shortly consider why a corporation should issue any such things as warrants but for the moment let us accept the fact that warrants are issued by various corporations, that they are actively traded on the American Stock Exchange, the Toronto Stock Exchange, regional Stock Exchanges and over-the-counter, and that they afford interesting opportunities for enhancement of capital, sometimes bordering on the spectacular. (And we may add hastily that the opportunities for diminution of capital are equally spectacular.) But most of all, the writer would like to emphasize that the relationship between the movement of the common stock and the warrant is almost a mathematical one, and lends itself quite readily to intelligent action, once the characteristics of common stock warrants have received the close and careful study they deserve.

There is no mystery as to why the warrant moves with the common stock. To use a simple analogy, if you owned an option on a piece of property which gave you the right to buy that property for \$5,000, and

that option was transferable and could be sold by you at will, then the sale value of the option would be determined by the current value of the property. If there were buyers willing to pay \$10,000 for the property, your option to buy it for \$5,000 must be worth at least \$5,000, since the transaction could be completed on the spot and that is how much you would gain. In addition, if you expected that a few more years would see the value of the property go up still further, you would place a value on that option considerably greater than \$5,000, depending upon how optimistic you felt regarding the ultimate future worth of the property.

If the current market value of the property was only \$1,000, your option to buy it at \$5,000 would be worth much less than in the previous paragraph. Yet, the possibility that at some time in the future the property might go up in value, would afford a certain value to the option, the exact valuation being determined again by how optimistic you or a possible buyer might feel about the future price of the property.

It is exactly the same with a warrant on a common stock. If a warrant you possess gives you the right to buy XYZ common stock at 5 and XYZ common happens to be selling in the open market at 10, then you would not be willing to sell your warrant for less than 5 because that is how much you would immediately profit by if you turned your warrant into the corporation, had it exchanged for common stock at \$5 a share and then immediately sold it in the open market for \$10 a share. If you also felt that XYZ common stock was destined to go much higher in price at a later date, you might not be willing to sell your warrant for less than 7 or 8. The difference between the break-even point on a warrant at the moment and the additional premium placed on it above that point is called exactly that, the 'premium'. In other words, if the stock sells for 10 in the market, and the warrant allows you to buy it for 5 from the company, the warrant is worth at least 5. If it is selling for 7, then the 'premium' is 2.

Taking the other case, if a warrant gives you the right to buy a stock for 5 and the stock is actually selling on the market for 2, you could not possibly make a profit by buying the warrant for the purpose of exercising it. In this case no 'premium' is involved. The market price of the warrant depends solely on a projected future rise in the market price of the common stock.

As a very important point, the time limit on a warrant must be considered before all else. Some warrants have no time limit and never expire. Others have a definite time limit. Atlas Corp. warrants are perpetual -- Sheraton Corp. warrants expire in 1964. The significance of this fact will be dwelt upon later in some detail.

Here now is an actual historical example. Atlas Corporation warrants previously gave you the right at any time, without limit, to buy Atlas Corp. common at \$25 a share. (The later text will explain the current warrant privilege in view of a 1956 4 x 1 split in both common and warrant.) Remember that it is the corporation itself which redeems these warrants and exchanges them for common stock at the stated price. In 1942 the stock market was at the low point of a bear market and Atlas Corp. common was selling at 6 on the New York Stock Exchange. On the then New York Curb Exchange, now the American Stock Exchange, Atlas Corp. warrants were being traded. The privilege of buying Atlas Corp. common at 25 when the stock was only selling for 6 was rated as worth

only 25¢. Atlas warrants, then, were selling for 25¢ a warrant. For \$500 you could have purchased 2,000 warrants.

In 1946, just four years later, we were at the top of a rising market and Atlas Corp. common was selling for 34-3/8. With the stock selling for 34-3/8 the right to buy it at 25 must be worth at least 9-3/8. In addition optimism was running high, as is usual in a rising market, and a premium of 4-1/4 points was being paid for Atlas Corp. warrants. Consequently, on the New York Curb Exchange, the warrants were selling for 13-5/8. Your \$500 investment in 2,000 warrants in 1942 was now worth \$27,250! By 1955, Atlas warrants had made a new high of 24-1/4 (common stock at 48-3/4) and that same \$500 investment had risen to a worth of \$48,500.

Such are the profit possibilities in warrants, but a word of warning -- in almost no other aspect of the securities business is it possible to gain such appreciation of capital -- and by the same token, in almost no other aspect of the securities market is it so necessary to apply care and intelligent analysis to avoid equally large loss.

HOW DO WARRANTS COME INTO BEING?

Since it is always best to start with first things first, we return to a previously unanswered question -- why do corporations issue any such things as warrants? We will find that warrants come into a company's capitalization through two major paths -- in reorganizations and attached to new issues -- and that in both cases they are given as inducements. In reorganizations warrants may be given to a certain class of stockholder in exchange for his giving up something else -- say, the right to an accumulation of back dividends. In new issues the company is anxious to sell its bonds or preferred stock, or even common stock, on favorable terms as to price and interest or dividend yield. By giving long-term warrants with the new issue, they induce the prospective purchaser to accept a possibly lower interest rate on a bond, or a lower dividend rate on a preferred stock, and to overlook other possibly weaker features in the new issue. Certainly, in the years 1952-1958, many new warrants came into the securities market as a by-product of the marketing of new issues and this trend has since continued. We will now present an actual example of each -- Alleghany Corp. warrants via the "reorganization" route and Canadian Oil Companies warrants via the "new issue" route, and those two examples will also serve as a springboard to demonstrate important warrant principles which will point the way towards profits in warrants and away from the potential losses which always await those who try to speculate without fully understanding what they are doing.

ALLEGHANY CORP. WARRANTS

To understand what follows probably requires a paragraph of explanation because although the heading reads "Alleghany Corp. Warrants, you will find a great deal of discussion about the company, Alleghany Corp., before you get to the warrants. We are doing this to bring home two vitally important points to the reader: (1) Before considering the possible worth of a warrant, you must first think very hard and very seriously about the common stock on which it is a call. (2) in order to understand the potential worth of a company, you should attempt

to find out all you possibly can about it, not contenting yourself with a mere surface study of current figures of earnings, assets and dividends, but studying as much of the past record as you can possibly unearth. A company's past record and past history almost invariably tells you a great deal about the company's future potential and it is proper evaluation of that potential which most often indicates a profitable warrant selection. The following story of Alleghany Corp., then, up to and beyond the issuance of the warrant in 1952, should serve as something of a model in the type of analysis-in-depth which is so necessary to the true understanding of any company and its securities. It also happens to be, we think, a most significant story, and since Alleghany Corp. warrants are perpetual and of interest in current markets, it is a story you should be familiar with. The following, then, is an example of the type of research you should do on a company before you consider the possible worth of its warrants.

ALLEGHANY CORPORATION

Alleghany Corp.'s. story begins in Cleveland, Ohio, before it gets to Wall Street, and our cast of characters are two brothers with family names of -- Van Sweringen. Their first names were Oris Paxton and Mantis James but they were universally referred to, mercifully we suppose, as O.P. and M.J., and were quite as well known in the 1920's as the J.P. (Morgan) we still remember today. The name Van Sweringen conjures up the stock market of the 1920's. The story is an incredible one, and also one which few would want to see repeated. It began in Cleveland around 1916 when the Van Sweringen brothers, O.P. and M.J., fresh from real estate promotions which had netted them about \$500,000, looked about for some new avenues for what later proved to be their insatiable ambitions. The story goes that they became irritated with the N.Y. Chicago & St. Louis R.R. (the famed "Nickel Plate") because it posed some minor interference with their real estate operations, and conceived the idea of removing the irritation by buying the railroad. Whether this is true or not, our story begins with the purchase of this railroad and from here on the story is all fact as recounted in Congressional hearings of the 1930's. This is truly fact stranger than fiction.

The N.Y. Central R.R. owned the Nickel Plate outright and wanted \$8,500,000 for the property, the sale being forced by an I.C.C. ruling. The Van Sweringen brothers showed, even in this first maneuver, their genius for calling forth millions from the pockets of others by the wave of a seemingly magic wand. The Central and the brothers agreed that \$2,000,000 should be paid in cash and a note for \$6,500,000 taken, upon which payment was to begin in 5 years. The note could be worried about a few years later, but how to get the \$2,000,000 in cash?

The Van Sweringens solved this problem simply -- they borrowed \$2,100,000 from a Cleveland bank, giving them a 6 month note for the money and putting up the rights to their deal with the N.Y. Central as collateral. Six months was a short time so they now had to work rapidly. When the \$2,000,000 was paid to the Central, the Van Sweringens, tenuous though the ownership might be, were in possession of all the outstanding stock of the Nickel Plate R.R. They promptly formed their first holding company, the Nickel Plate Securities Corp., selling publicly \$2,100,000 of preferred stock, which just happened to be the amount of money owed to the bank. With this money they paid off the bank loan and then made the friendly gesture of issuing common stock to the preferred stockholders of

the holding company, share for share, as a dividend. To themselves, however, they issued 83% of the new voting common as "compensation for organization".

Thus, using little more than their ingenuity, they had assumed control of the holding company (Nickel Plate Securities Corp.) which in turn owned all the outstanding stock of the Nickel Plate, a railroad with \$72,000,000 in assets. From here on progress was rapid. The Van Sweringens used Nickel Plate credit to borrow another \$2,500,000 from the N.Y. Central and bought control of Lake Erie & Western R.R. Adding the credit of this new property to the Nickel Plate, they borrowed another \$3,500,000 and bought control of Toledo, St. Louis & Western. Then they merged all the stock of the three roads and formed the new Nickel Plate R.R. with total assets of about \$200,000,000.

Ascending to control of \$200,000,000 in seven years might seem to some to call for at least a period of rest and consolidation, but not for O.P. and M.J. Coming again to the public for funds, they sold about \$30,000,000 worth of bonds, thus heavily mortgaging the Nickel Plate properties, and used this money to buy enough stock to control the Chesapeake & Ohio R.R., adding a rail system of more than 3,000 miles and assets of \$550,000,000. C & O's funds and credit were now added to that of all the other roads and the Van Sweringens began to buy up control of the Erie R.R. This being accomplished Erie added another 2,200 miles to the system and \$570,000,000 of assets. Next to be swallowed was the Pere Marquette R.R. and here the Van Sweringens had the help of a J.P. Morgan & Co. loan.

By 1925, O.P. & M.J. Van Sweringen had, in 9 years, assumed control of 9,245 miles of railroad and \$1-1/2 billions in assets. The brothers now controlled a maze of holding companies, each standing on the shoulders of another, each dependent for its existence upon the market value of the underlying rail stocks and bonds which were the collateral for a vast debt structure running into the hundreds of millions, borrowed alike from the public and the banks. In 1929, the Van Sweringens launched what was hailed in feverish Wall Street as their crowning triumph, the Alleghany Corp. Large blocks of stock of Nickel Plate, C & O and Van Sweringen holding companies, were turned over to this new giant holding company. As usual, the brothers took control by taking a majority of Alleghany common, 2,250,000 shares, and also paid themselves \$36 millions in cash, money which had been taken in by public sale of new Alleghany Corp. bonds. Before the October 1929 debacle, the Van Sweringens also sold out 680,000 shares of Alleghany common at a profit of \$23 millions. They were riding high, with the millions rolling in too fast to count, and their control stretched over properties too vast in magnitude to encompass.

But it still was not enough. O.P. and M.J. eyed the Missouri Pacific system, a \$660 million organization, and began to swallow it by stock purchase in the open market. In May 1929, they borrowed almost \$20 millions from J.P. Morgan & Co., then another \$ 11 millions a month later, then another \$ 9 millions. Alleghany Corp. sold more bonds to raise additional capital and here the Van Sweringens made a fatal error. The bond indentures carried the provision that at all times the market value of pledged securities underlying the bonds would be at least 150% of the face amount of the bonds. With a booming market the provision was nothing to worry about. But what if the market should slide? Here

we can measure the optimism inspired by the "New Era" of an ever-rising stock market -- an optimism so boundless that even such shrewd operators as M.J. and O.P. were swept away in intoxicating torrents of ticker tape.

October 1929 and "Black Friday" rolled around -- billions in paper profits vanished into thin air. As the ticker tape told its frightening story the economic underpinnings of the western world began to quiver. The Credit Anstalt bank in Austria failed, England went off the gold standard, long lines of unemployed began to form in every country, and the stock market went down and down, aiming tremendous blows, one after another, at the enormous, unwieldy and vulnerable structure of the Alleghany Corp., kingpin of the Van Sweringen system of holding companies.

For several more years Alleghany wobbled through an uncertain course, threatening to topple at any moment under the heavy load of its debt. Fearful that the final bankruptcy of the Van Sweringens would mean large additional blocks of stock thrown on the market for what they could bring to satisfy creditors, groups of bankers such as J.P. Morgan & Co. and the Chase National Bank, and the R.F.C. under the Hoover Administration, pumped tens of millions into the structure. In 1934, when it seemed that interest payments could no longer be maintained, the Van Sweringens pulled their last rabbit out of the heat. They persuaded bond holders to accept prior preferred convertible stock paying \$2.50 per annum per share, in exchange for 5 years interest payment on their bond holdings. But the dividend was immediately passed the first time it came up and until 1950 nothing at all was ever paid.

The last act of the old Alleghany Corp. ended on a note of anti-climax. The Van Sweringens defaulted on additional debts they had contracted and securities representing control of Alleghany Corp. were sold to satisfy creditors. Thus, in 20 years, the cycle for the Van Sweringens had gone full circle, from nothing to the heights, and back to nothing again.

ALLEGHANY CORP. -- CHAPTER II

One of the characteristics of a corporation is that its life is independent of those who may momentarily have ownership and control. Thus, the Van Sweringens could breathe life into this enormous entity, but could not take Alleghany Corp. with them when they faded into oblivion. In 1937 the curtain arose on a new phase of the story of Alleghany Corp. From that time until the present we have, not O.P. and M.J. Van Sweringen, but instead we have Robert R. Young and Allan P Kirby as the new controlling interests. And the story of the manner in which the dying giant came back to life and found new vigor is as interesting as what has gone before, and vastly more significant for the purposes of this study.

In 1937 Alleghany Corp. was a financial nightmare. The company had a debt of almost \$80 millions, consisting principally of 3 issues of 5% bonds, coming due in 1944, 1949 and 1950. Interest burden amounted to almost \$4 millions per year. No dividends were being paid on either the convertible prior preferred or the Series A preferred, and back dividends owed were already running into additional tens of millions. There was no equity at all for even the preferred stockholders since corporation debt alone exceeded the value of corporation assets. This was the situation

inherited by the Young-Kirby group and the picture could hardly have been more black. It remained black in 1938 and 1939 but in 1940 a ray of light appeared -- the company actually showed a net profit on its operations, and this was followed in 1941 by an even larger profit. In December of 1941 came Pearl Harbor and global war. The railroads of the country suddenly found their full capacity strained to the utmost and rail shares began a steady climb. These events changed the black of night into the light of day for Alleghany Corp.

Beginning as far back as March 1938 the new management had taken as their task the hacking away of the strangling debt structure which continuously threatened the solvency of Alleghany Corp. In 1939 and the two years that followed a small beginning was made. By 1942, more than \$12 millions of outstanding bonds had been purchased in the open market and retired. In 1943, the financial skies brightened considerably and \$22,643,000 of bonds coming due were refunded by cash on hand and the proceeds of a \$16 million bank loan. On August 9, 1944 came a milestone in the history of Alleghany Corp. Some months before, the company had sold 704, 121 shares of its holdings in Chesapeake & Ohio and with the help of the more than \$31 millions thus received, the corporation redeemed the outstanding 5% bonds in their entirety, amounting to \$39,697,000, completing the liquidation of the original \$85 millions of bonds sold in 1929 under the Van Sweringens. In 1945, bank loans of \$15 millions were retired, leaving a total indebtedness of only \$24 millions, all owed to two banks at low interest rates and presenting no further problems to Messrs. Young and Kirby.

The stage was now set for the final act in this remarkable story of what can only be termed the "rebirth" of Alleghany Corp. No dividends had been paid on the prior preferred stock or the Series A preferred stock for a very long time. Since the prior preferred was entitled to \$50 per share plus accumulated dividends and the Series A preferred to \$100 per share plus accumulated dividends, the claims of these two classes of stock, now that the bonds had been paid off, were huge. On September 9, 1946, coinciding with the severe Labor Day market break, Alleghany Corp. began to buy its own preferred stocks in the open market. For six years this process of continuous purchase and retirement went on, and the vital significance of this development is only appreciated when we look at the sum total of such purchases as of March 1, 1952. 74,791 shares of prior preferred and 430,795 shares of Series A preferred, representing 70% and 64% of the outstanding issues respectively, had been repurchased in the open market at a total cost to the company of about \$28 millions. These purchases wiped out \$46,819,000 in principal claims and \$52,618,000 in accumulated back dividends owed, from the debit side of the Alleghany Corp. balance sheet!

ALLEGHANY CORP. COMMON STOCK

We have not mentioned Alleghany common up to now -- that unfortunate equity remaining buried under tens of millions of debt, preferred stock and accumulated back dividends. Its beginning had been glamorous. Indeed, Congressional committee hearings in the 1930's brought out the fact that Alleghany common was one of the stocks snapped up by the famous J.P. Morgan & Co. "preferred list", whose 170 important members got the first opportunity to buy this choice issue at \$20 per share. Alleghany common then made a spectacular run up to a high of 56 in just a few

months after which it proceeded to jump right off the springboard and hit bottom a few years later at the somewhat disheartening figure of 12-1/2 cents.

In 1937, when the new management took over, Alleghany common was about \$25 per share under water. (Later pages will explain exactly what this term implies.) Taking the figures another way, Alleghany common was worth about \$100,000,000 less than nothing. But in 1952 the financial community had to suddenly awaken to the fact that the lowly Alleghany common had risen from its resting place far beneath the watery depths of the Van Sweringen bonds and preferred stocks and was, indeed, coming into view just below the water line. For this accomplishment the credit goes directly to the Young-Kirby group. Between 1937-1952 they had paid off and retired \$80 millions in bonds -- reduced annual interest burden from \$3,750,000 to about \$500,000 -- eliminated \$100 millions in principal and dividend claims of the two classes of preferred stock. As a result of this remarkable process, Alleghany common proceeded to give a convincing performance of a submarine which had been given the order to surface. From being \$25 per share under water in 1941, it moved up to an underwater depth of only \$15 per share in 1946, \$7.50 in 1949, and only \$4 in 1951.

(Now, we will come in the next paragraph to the first mention of the Alleghany warrant, but we must first again recall to the reader our reasons for taking so much space in a discussion of the past history of the company. The point is that when the Alleghany warrant came into existence in October 1952, the only logical and reasonable way to evaluate the warrant was to understand as fully and completely as possible, the potential worth of the common stock and, inevitably, the worth of the management upon whose continuing judgement the later fortunes of the company would rise and fall. It is this same type of research, ideally, which should precede an evaluation of any warrant.

FINALLY -- ALLEGHANY CORP. WARRANTS

Late in 1952 the financial newspapers reported that Alleghany Corp. management had proposed a plan to do something about the remaining 236,744 shares of Series A preferred stock still outstanding in public hands, entitled to \$100 per share in any liquidation plus accumulated dividends of \$113 per share. These preferred stockholders were offered the opportunity to accept, for each share of Series A preferred, \$100 principal amount of a new Alleghany 5% debenture bond, plus 20 warrants, good to buy 20 shares of Alleghany common at \$3.75 per share without time limit, the warrants being perpetual. Here was a classic example of the creation of a warrant during the course of a reorganization. The preferred stockholders were being asked to give up their claim to back dividends (which had little present chance of being paid) for a perpetual claim on the common stock of the company. If the company did well in the future, the common stock would advance from its then price of \$3 to, say, \$5, or \$10, or any upside figure for that matter.

The warrant, being the perpetual right to buy at \$3.75, must also then advance in price. The preferred stockholder could think as follows: I am exchanging a \$100 preferred stock paying 5-1/2% for \$100 of a debenture bond paying 5%, which seems somewhere near an even exchange. I am also exchanging my right to \$113 in back dividends for 20 warrants. If these

warrants ever reach a price of \$6, they will be worth \$120, or a bit more than is now owed me in back dividends. If Alleghany Corp does well both financially, and marketwise, these new perpetual warrants will reach \$6 considerably before I have any chance of collecting \$113 per share in back dividends. Therefore, it seems like a good idea for me to accept the exchange and take the new bond plus the 20 warrants for my share of preferred stock plus its accumulated back dividends.

Certainly the train of thought must have been somewhere along those lines because 100,000 shares of Series A preferred stock were turned in. This had the exceedingly important effect of wiping out the heavy liability of \$11,300,000 in accumulated back dividends and substituting 2,000,000 perpetual warrants to buy Alleghany common stock at \$3.75, which is where we now come in.

When Alleghany warrants first came into being they were trading over-the-counter at about 75¢ with the common selling on the New York Stock Exchange at about \$3. How would someone at that time go about evaluating the possible worth of this warrant? Over and over again in this study we will be emphasizing that warrants are mostly a matter of common sense and arithmetic. Using simple arithmetic, therefore, we know that the warrants are worth more than 0! That is, if the common moves above \$3.75 the warrants will have actual value measured by the amount the common sells above that figure. If the common goes to 6.75, the warrant is worth 3, and so on. So the warrant is certainly worth something as a perpetual call on a possible move by Alleghany Corp. common over the 3.75 mark. On the upside, with the common selling at 3, we certainly cannot possibly envisage the warrant being worth more than 3. Even if the warrant was the right to buy the stock at 0, making the warrant theoretically worth \$3 when the stock sold at 3, the common has the right to dividends while the warrant has no such right, so that the warrant has much reason to sell below the price of the common, and no reason to sell above it. We see then, that the new Alleghany warrant, in November 1952, with the common selling at 3, had to sell somewhere between 0 and 3.

Inevitably, the next step must be to appraise the future direction of the common stock, which means, also inevitably to evaluate the future worth of the company. That is, again, precisely why we presented our "analysis-in-depth" of Alleghany Corp., because that is the ideal way to come to any conclusion about the worth of a security, and even more so about so speculative an entity as a warrant.

While, therefore, we would ordinarily continue here to present an analysis of the potential worth of Alleghany common at the time the warrants became available, we are not doing this because to do so will upset the orderly progression of this study. That is, to understand the potential of Alleghany common from this point you have to first understand what an investment trust is, what leverage is, and why a high-leverage investment trust warrant is probably the most interesting type of warrant outstanding. This topic is of such importance, affecting such active warrants as Alleghany, Atlas, Tri-Continental, Investment Co. of America and several others, that we tell what we trust is a complete story further along in these pages, in its proper place. At this point in the Alleghany discussion, then, we will leave for later the further analysis of the company and concentrate on the most important point about any warrant--

arithmetic. By the time the reader has absorbed the next few paragraphs he should be somewhat surprised (and pleased) at how much arithmetic can tell us about the worth of a warrant, and how profits can be pursued with the weight of logic on our side, and the use of reason, something hard to find in many other aspects of the securities market.

We have seen that when the warrants of Alleghany Corp. first started trading over-the-counter they were selling at about 75¢ with the common trading on the New York Stock Exchange at the \$3 mark. Let us assume that our completed analysis has led us to the conclusion that Alleghany Corp. has an exciting future, holding excellent speculative promise. Would the warrant possibly be a better buy than the common stock? To answer this important question we assume two different alternatives:

- (1) We invest \$300 in 100 shares of Alleghany common at 3
- (2) We invest \$300 in 400 Alleghany warrants at 75¢

Let us now assume that Alleghany common doubles in price to 6. At 6, the warrant, being the perpetual right to buy at 3.75, must sell at least at 2-1/4. Actually, previous experience with warrants would indicate that the warrants would sell higher than their mere minimum value, but in the interests of mathematical certainty we content ourselves with pointing out that the warrants cannot sell below 2-1/4 when the common sells at 6. With the 100 common having advanced from 3 to 6, the purchaser of the common would have a 100% profit, or a \$300 gain. The 400 warrants would now be worth at least 2-1/4, or \$900, representing a 200% gain, or twice that enjoyed by the holder of the common.

Suppose further that the common advanced to 9. Here, the purchaser of 100 shares of common at 3 would have a \$600 profit, a gain of 200%. But at 9 the warrant must sell at least at 5-1/4 and 400 warrants would be worth \$2,100, up 600% from the original \$300 cost.

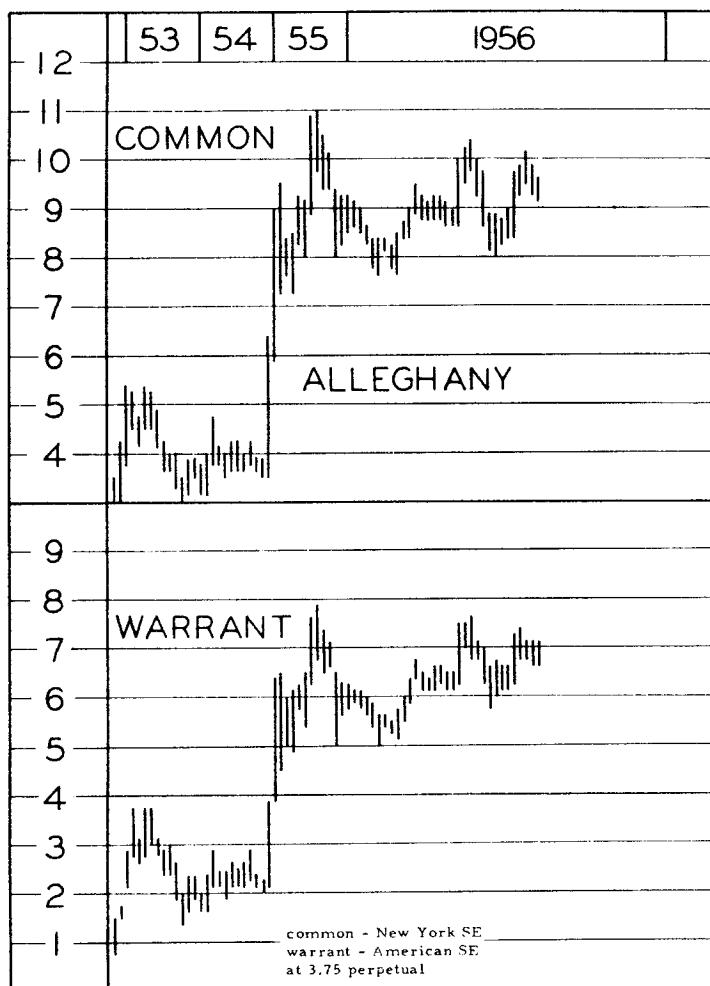
Finally, suppose the common advanced to 12. The purchaser of 100 shares of common at 3 would have a \$900 profit, a gain of 300%. At 12, the warrant must sell at least at 8-1/4 and 400 warrants would be worth \$3,300, up 1,000% from the original \$300 cost.

Obviously, with the warrants at 75¢ when the common sold at 3, the warrants were a much better buy on the upside, showing a \$600 profit when the common had a \$300 profit, an \$1,800 profit when the common had a \$600 profit, and a \$3,000 profit when the common had a \$900 profit -- all on an equal \$300 investment for each. The ability of the warrant to show a far greater percentage profit on the upside than the common stock is its most important attribute and we shall be explaining it with further examples in the later text.

But we must also consider the downside. Suppose the \$300 investment in 100 Alleghany common was halved by the common moving down to 1-1/2? At 1-1/2 the warrant has no actual value and has only its right as a perpetual call on the common stock to determine its market price. But this is quite enough, and though Alleghany common has never sold below 3 since the issuance of the warrant, we are of the opinion that with the common at 1-1/2 the warrant would sell somewhere around 50¢. Since the warrant could fall to 37-1/2¢ before showing even the \$150 loss suffered by the common, the \$300 investment in the warrants is at least as safe on

the downside as the \$300 investment in the common.

To sum up then, when Alleghany warrants were selling at 75¢ in October 1952, and Alleghany common at 3, a \$300 investment in the warrants as against the same investment in the common would have shown at least 2 and 3 times the amount of profit on the upside while running no greater risk on the downside. The warrants were a distinctly better speculation than the common at those prices.



It is now in order to look at the actual charted price fluctuations of Alleghany common and warrant in the years after its issuance, and to realize that the \$300 investment in 400 warrants at 75¢ worked out even more favorably than we have indicated above because the warrants consistently sold at a premium -- that is, at a price above their actual conversion value. Thus, when the common sold at 6 the warrants sold not at 2-1/4, their conversion value, but at 3-3/4. And when the common sold at 9 the warrants sold not at 5-1/4 but at 6-3/8. In 1955 Alleghany common reached a high of 11, at which point the warrant sold at 7-7/8. The \$300 investment in the common, at this point, had appreciated to \$1,100, up 266%. At 7-7/8 for the warrant, the original \$300 investment in 400 warrants was worth \$3,150, up 950%. The warrant had moved up 3 times as fast as the common!

CANADIAN OIL COMPANIES WARRANTS

Comparatively few warrants have appeared in recent years as products of reorganizations, although those that have done so have been of unusual interest. Literally dozens of long-term, important warrants have made their appearance as did the Canadian Oil Companies warrants, attached to new issues of senior securities, and attached thereto for the express purpose of aiding in the sale of the new issue.

A "prospectus" by Canadian Oil Companies, Ltd., dated December 1, 1952, gives the complete picture of the new issue, one of \$12,000,000 of 5% debentures, Series A -- each \$1,000 bond carrying 30 warrants -- each warrant good to buy 1 share of common stock at \$14 per share to March 31, 1955, at \$16 thereafter to March 31, 1957, and at \$18 thereafter to March 31, 1959, when the warrants would expire. The attraction of the warrant to the prospective bondholder is evident. An ordinary bond, with no warrants attached, might itself look sufficiently interesting, since each \$1,000 bond was to be repaid in full on December 1, 1972 and in the 20 intervening years, \$50 interest would be paid each year, representing a 5% return on what was actually a loan to the company (which is the definition of a bond). How much happier for the bondholder though to have, in addition to this promise to repay dollar for dollar and his 5% return, a claim on 30 shares of the common stock of the company which had cost him nothing additional. If the company should do well during the 6-1/4 years constituting the life of the warrant, the common stock of the company might rise considerably, and the warrant would then similarly appreciate in price. Thus, while an ordinary bondholder has only his claim to repayment of principal at a stated time, plus annual interest, the bondholder who has common stock warrants given with his bond may potentially enjoy capital appreciation as well. Certainly, the device of bonds with warrants (and preferred stock with warrants) has appealed to prospective investors, issuing corporations and investment bankers alike because the number of issues have been increasing year after year. This writer too has been delighted with the strength of the trend since dozens of interesting, long-term warrants have thereby come into existence, providing the raw material for many years to come for the warrant trading methods being explained in these pages.

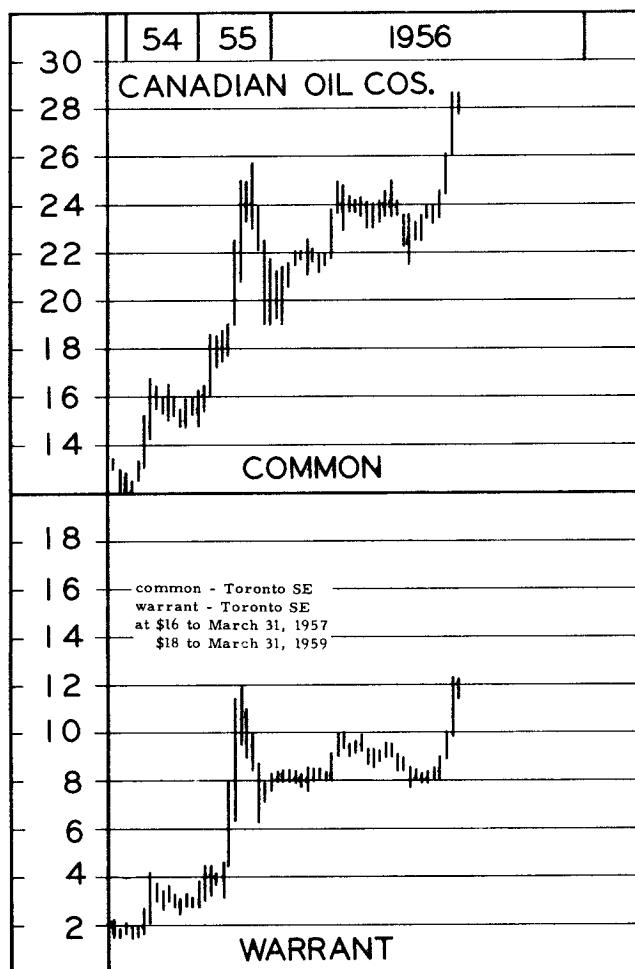
Let us now repeat what can well be repeated over and over again. Before you let arithmetic take over in the valuation of a warrant, you must make the fullest possible study of the company on which the warrant is a call. Space limitations obviously prevent us from presenting a full report for every warrant described in these pages such as we attempted for Alleghany Corp., whose story is not finally completed until later on in this study. But our Alleghany report is meant as a model for the reader to follow insofar as he finds it possible to do. A warrant is the right to buy the common stock of a company, and any success with speculation in the warrant is usually proportional to the understanding one has of the common stock.

Our description of Canadian Oil Companies, as a company, will necessarily be in abbreviated form, but its interesting potential becomes evident nonetheless. As one of Canada's leading refiners and marketers of petroleum and petroleum products, the potential for the company had to be viewed against the background of the following statistics for Canada as a whole:

Canadian Production and Consumption of Petroleum

<u>Year</u>	<u>Production *</u>	<u>Consumption *</u>
1946	20,841	223,322
1947	21,176	269,886
1948	33,800	289,930
1949	58,806	319,961
1950	79,709	367,254
1951	131,866	420,227
1952	168,825	466,962

* barrels per day



Against this background of steady domestic growth in both production and consumption of petroleum and its products, the figures of the company's own growth pointed to the heartening conclusion that continued Canadian economic growth would likewise foster continued growth of Canadian Oil Companies. Here are some of those figures.

<u>Year</u>	<u>Sales</u>	<u>Net Profit</u>	<u>Working Capital</u>	<u>Fixed Assets</u> *
1948	\$ 31,425,000	\$ 887,000	\$ 4,157,000	\$ 19,900,000
1949	33,818,000	931,000	4,879,000	21,100,000
1950	38,329,000	1,140,000	6,010,000	23,400,000
1951	42,891,000	1,148,000	5,015,000	36,300,000
1952	48,930,000	1,253,000	9,069,000	50,185,000

* Land, Buildings and Equipment Before Depreciation

A full discussion of the company would bring out many additional interesting points, but the above figures at least give us the picture of a growth company in a growth industry in a growth country -- a most satisfactory combination! It is now time to turn once more to the fascinating mathematics so peculiar to the field of the common stock warrant, and we draw your attention to the chart picture of the price fluctuation of common stock and warrant for the years following 1952.

It is hardly necessary to point out that Canadian Oil Companies fulfilled the promise of its potential growth after 1952. Indeed, every figure previously given for Canada as a whole and for Canadian Oil Companies itself was outstripped in each succeeding year. But what we additionally wish to point out is that the common stock warrant again proved its "speculative merits" in the field of simple mathematics. When the warrant started trading on the Toronto Stock Exchange in 1953 (it did not become detachable, that is, traded separately from the bond, until September 1, 1953), it sold at 1-1/2 with the common at 12. We again have our interesting choice:

- (1) Buy 100 shares Canadian Oil Companies common at 12
cost \$1,200
- (2) Buy 800 Canadian Oil Companies warrants at 1-1/2
cost \$1,200

Since we have the chart in front of us, we need not indulge in any hypotheses. The common stock advanced to a high of 25-3/4 in 1955, at which point the warrant sold at 12.

- (1) The holder of 100 shares Canadian Oil Companies common at 12, saw his \$1,200 appreciate to \$2,575.
- (2) The holder of 800 Canadian Oil Companies warrants saw his \$1,200 appreciate to \$9,600.

Let us examine the downside possibilities, and here we must again resort to hypothesis because Canadian Oil Companies common and warrants had the happy experience of moving above 12 and 1-1/2 respectively after 1952. But assume that the common had declined 50% to a price of 6 for the common. The \$1,200 investment in 100 shares of common would then show a \$600 loss. The warrants could then have fallen to 75¢, at which point the \$1,200 investment in 800 warrants would also show a \$600 loss. It is this writer's opinion that the warrant would certainly have sold no lower than 75¢ at \$6 for the common, and probably would have sold a bit higher since warrants increase their speculative

appeal enormously as their price goes down. In any event, the \$1,200 investment in 800 warrants should probably have done no worse than the \$1,200 investment in 100 shares of common on the downside, but showed almost seven times as much appreciation on the upside. Again, the arithmetic was all on the side of the warrants!

(Note: In 1957 Canadian Oil Companies common reached a high of 39-1/2 while the warrant appreciated at the same time to 21-1/2. The common had appreciated 229% from 12 to 39-1/2, the warrant 1,333% from 1-1/2 to 21-1/2. In the 1953-1957 period the warrant had advanced 5 times as fast as the common.)

SOME PRACTICAL ASPECTS OF COMMON STOCK WARRANTS

If this writer were not convinced of "the speculative merits of common stock warrants" he would not be writing this study. However, he would not be fair to those "merits" and certainly not to you who are reading these words, if he did not at this point introduce a few sobering thoughts. To say that money can be lost as well as made with warrants comes close to being the understatement of the year. Unwise speculation in any sector of the stock market usually proves quite costly, and with such an extremely volatile component as a common stock warrant, the losses can be quicker and more extreme.

But there is no necessity to park common sense and normal intelligence elsewhere when buying and selling stocks or warrants (though there are times when we believe this to be a widespread custom). We have already indicated that intelligent speculation in warrants can not only yield large profits, but can utilize simple logic and simple mathematics to a possibly greater extent than in any other sector of the stock market. And there will be more examples to follow which will bring home this point even more clearly. But there still remains the necessity to approach the subject soberly and not be carried away by excessive enthusiasm. For example, in many of our discussions such as Alleghany Corp. and Canadian Oil Companies warrants we may exercise an author's prerogative in arbitrarily picking lows and highs though in practice one can never buy at the precise low and sell at the exact high. Also, lessons learned in one warrant may be applied without sufficient analysis to another warrant in a completely different situation, with possibly disastrous results. But these are merely failures of the intelligence which it is the reader's responsibility to avoid, and where 'lows' and 'highs' are concerned one can still profit nicely missing both low and high by a considerable margin if all other applicable principles have been given careful attention. With this preamble, let us stress a few basic principles before we continue our study of the common stock warrant.

1. Be Extremely Careful With Warrants That Have Expiration Dates

On page 28 you will find a chart of Penn-Dixie Cement warrants. If you now look at that chart you will notice that when Penn-Dixie common sold at 20 in 1946 the warrant was selling at 12 -- when it sold at 20 in 1947 the warrant sold at 8 -- when the common sold at 20 in 1948 the warrant sold at 6 -- in May 1949 when the warrant was due to expire at the end of the month, Penn-Dixie common again sold at 20 but this time the warrant was selling for 50¢. You see that though the common stock

might stay at the same price, the warrant must inevitably lose its value as the date of its expiration draws close. This is always true of warrants where the common stock is trading below the conversion price and in the case of warrants whose stocks are trading above conversion price, giving the warrant a basic value, any premium must tend to shrink and then vanish as expiration date approaches. In either case, the expiration date must be watched closely, and even when several years remain for the life of the warrant the warning flags must already be flying.

2. Look For Warrant Opportunities When The Common Stock Is A High Multiple Of The Warrant

By the above heading we mean that when the common stock sells for 3, 4 or even 10 times the price of the warrant, you have a far greater opportunity than when the common stock is selling at only twice the price of the warrant, or at even a smaller ratio. Consider the case of Atlas Corp. back in the 1942-1946 bull market. When Atlas common went from 6 to 16, the warrants went from 25¢ to 4, an increase of 1,500%. Another 10 point increase in the common from 16 to 26 brought the warrants from 4 to 8-1/2, or a gain of about 100%. A further 8 point rise in the price of the common from 26 to 34 caused the warrants to go only from 8-1/2 to 13-1/2, a gain of considerably less than 100%. The great difference was that when Atlas common was 6 and the warrants were 25¢, the common was selling at 24 times the price of the warrant. By the end of the last upward move, with the common at 34 and the warrants at 13-1/2, the common was little more than twice the price of the warrant.

When the common is a high multiple of the warrant you generally find the situation we outlined for Alleghany Corp. and Canadian Oil Companies warrants of much more to gain on the upside and no greater risk, or less risk, on the downside. But when appreciation has already taken place and the common is a far lower multiple of the warrant, not only will further upward moves produce smaller percentage rises in the warrants (though still somewhat greater than for the common), but the risk in the warrant has become greater than that for the common. To drive this point home we have only to look at our statistics.

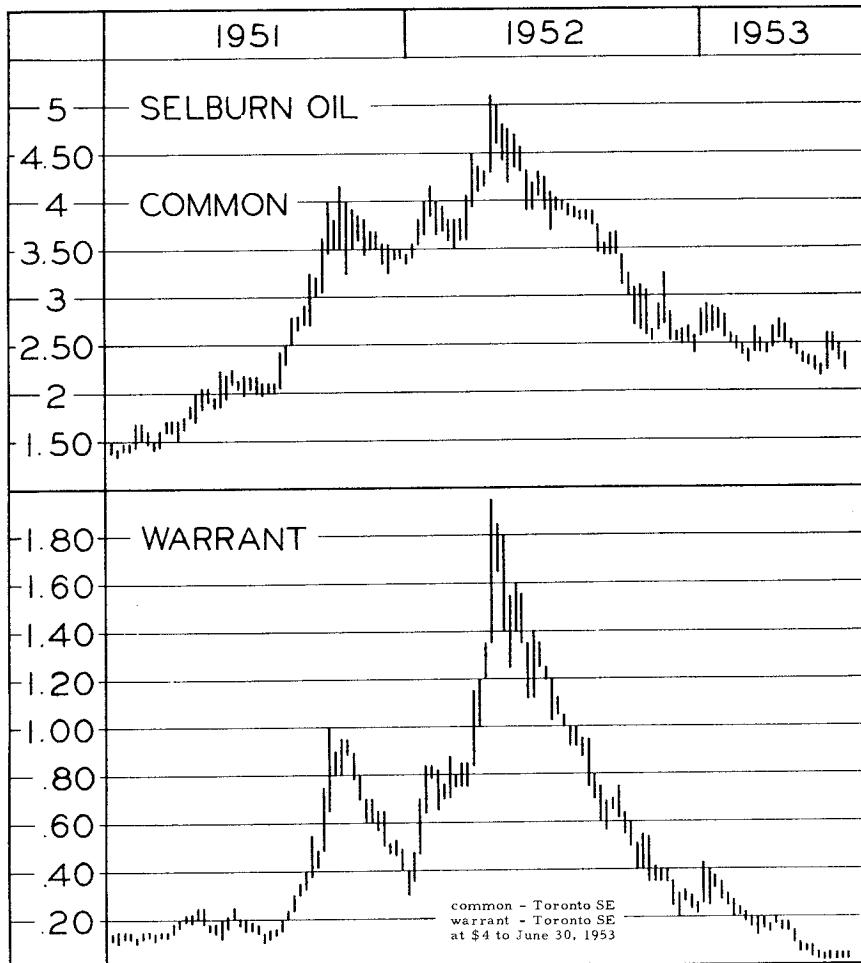
After the 1946 highs of 34 for Atlas common and 13-1/2 for Atlas warrant, what was the effect of the market break? Atlas common declined from 34 to 22 in 1947, while Atlas warrants declined from 12-1/2 to 3-5/8 in that same period. The common had declined 35%, the warrant 73%. Look now at the Canadian Oil Companies chart. In 1955 the common dropped from its high of 25-3/4 to 19, with the warrant in the same period dropping from 12 to 6-1/4, a drop of 26% for the common and 48% for the warrant.

The Example of Selburn Oil Warrants

Let us give one further example to demonstrate this most important point, that warrant opportunities usually arise when the common is selling at a high multiple of the warrant, and its corollary, that as the warrant demonstrates its "speculative merits" by rising far faster than the common, its risk feature begins to multiply until, at a certain point, potential gain is outweighed by potential loss.

In 1950 a warrant started trading for a promising low-priced oil stock in Canada. That oil stock was Selburn Oil, today expanded by acquisition

and changed in name to Bailey-Selburn, one of the most promising Canadian oil equities. But in 1950 Selburn Oil was yet little more than a promise and the warrants could hardly be considered as anything more than a rash speculation. Consider, however, how 'mathematics' can point to a good warrant opportunity even when one is doubtful about the worth of the common stock itself.



In 1951 Selburn Oil common reached a low of \$1.35. The Selburn Oil warrant was the right to buy stock at \$4 to June 30, 1953 and there weren't many holders of the warrant too hopeful that the common would ever reach the \$4 mark. Consequently, the warrants were selling on the Toronto Stock Exchange for only 10¢. At this point of \$1.35 for the common and 10¢ for the warrant, the common was at a multiple of 13-1/2 times the price of the common, and multiples such as this should always cause one to take a second and a third look at a warrant. As another important point, the warrant still had two years to run, and Selburn Oil was at least a 'hopeful' company in a 'hot' industry. We again have our two alternatives before putting mathematics to work:

- | | |
|---|-----------------------|
| (1) Buy 100 shares Selburn Oil common at 1.35 | cost \$ 135 |
| (2) Buy 1,350 Selburn Oil warrants at 10¢ | cost \$ 135 |

If Selburn Oil common dropped 50% to sell at 67¢, the warrant could drop to 5¢ before showing any greater loss and we are of the opinion that if you did not stay with the warrant longer than one year, it would still be selling at least at 5¢ as a one year call. In other words, we find the usual circumstance of the warrant presenting no greater risk than the common on the downside when the common is at a substantial multiple of the warrant. Looking at the upside results we find Selburn Oil moving up in the 1952 Canadian boom in low-priced oil stocks to sell at a high of 5.10. At 5.10 for the common, the warrant, being the right to buy at 4.00, was worth a minimum of 1.10, and was actually selling at 1.95. We see here the typically unfortunate tendency of many 'investors' to throw stocks (or warrants) away at inordinately low prices during market pessimism, and to pursue them frantically at inflated prices during market optimism. Thus, Selburn Oil warrants were 10¢ in 1951 (too low a price placed on their potential value), and \$1.95 in 1952 (too high a price, as we shall soon see). Working out our by now familiar mathematics we find the following with Selburn Oil common at 5.10 and the warrant at 1.95:

- (1) \$135 invested in 100 Selburn common was now worth \$510, up 277%
- (2) \$135 invested in 1,350 Selburn warrants was worth \$2,632, up 1,850%

The warrants had advanced more than 6 times as fast as the common on the upside, while presenting little if any greater risk on the downside within, say, one year after purchase. With Selburn Oil common at 1.35 and Selburn warrants at 10¢ then, in 1951, the arithmetic was completely on the side of the warrants once more.

Now let us turn that same principle around to demonstrate the other side of the picture. At the 1952 high, with Selburn warrants at 1.95 and Selburn common at 5.10, the common was still selling at more than $2\frac{1}{2}$ times the price of the warrant, but this was quite a drop from the $13\frac{1}{2}$ times the warrant price of the previous year. In addition, the arithmetic no longer was as convincingly on the side of the warrant. Take our two alternatives once more:

- | | |
|--|----------------------|
| (1) Buy 100 Selburn Oil common at 5.10 | cost \$510 |
| (2) Buy 266 Selburn warrants at 1.95 | cost \$510 |

Assume that the common doubles in price to 10.20. At 10.20 for the common, the warrant, being the right to buy at 4.00, must be worth a minimum of 6.20 but is unlikely to develop a premium and sell higher than that because of approaching expiration and the loss of the 'low-priced' tag which so buoys up stocks and warrants when they are selling in the \$1 or 'pennies' class. The results then would be:

- (1) \$510 invested in 100 Selburn common would be worth \$1,020, up 100%
- (2) \$510 invested in 266 Selburn warrants would be worth \$1,659, up 225%

While the warrant still showed twice as much appreciation on the upside, what had we to look forward to on the downside? Assume a 50% drop in the common from 5.10 to 2.55, with the date of expiration drawing

closer since the 1952 high figures were already only one year away from the June 30, 1953 expiration date for the warrant. We would have to assume that the warrant price would quickly sink to below \$1, possibly to 50¢, possibly even lower, and certainly to 0 if Selburn common failed to recover above the \$4 mark before June 30, 1953. Which is exactly what happened, with Selburn Oil warrants dropping from their 1.95 high in 1952 to an ignominious fraction of 1¢ low on the last day of its life on June 30, 1953.

Conclusion:

The great percentage rises in warrants take place when the warrants are relatively cheap -- that is, when the common stock is selling at a high multiple of the warrant. These 'multiples' must still all be viewed in the light of other factors -- the remaining life of the warrant, the worth of the company, and the over-all market situation itself. For example, whereas one would require a 10 x 1 multiple for a two-year warrant on a doubtful stock, a perpetual or 10-year warrant might be welcomed with open arms at a multiple of 3 or 4 times. But it still will always work out to simple arithmetic. You merely ask the question: If the common stock goes up X points how much then would I gain by the increase in the price of the warrant? If the common stock goes down by the same X points, how much would I lose by a decline in the price of the warrant? If the possible profit is much larger than the possible loss for the same move either way of the common stock, you probably have a good warrant situation.

* * * * *

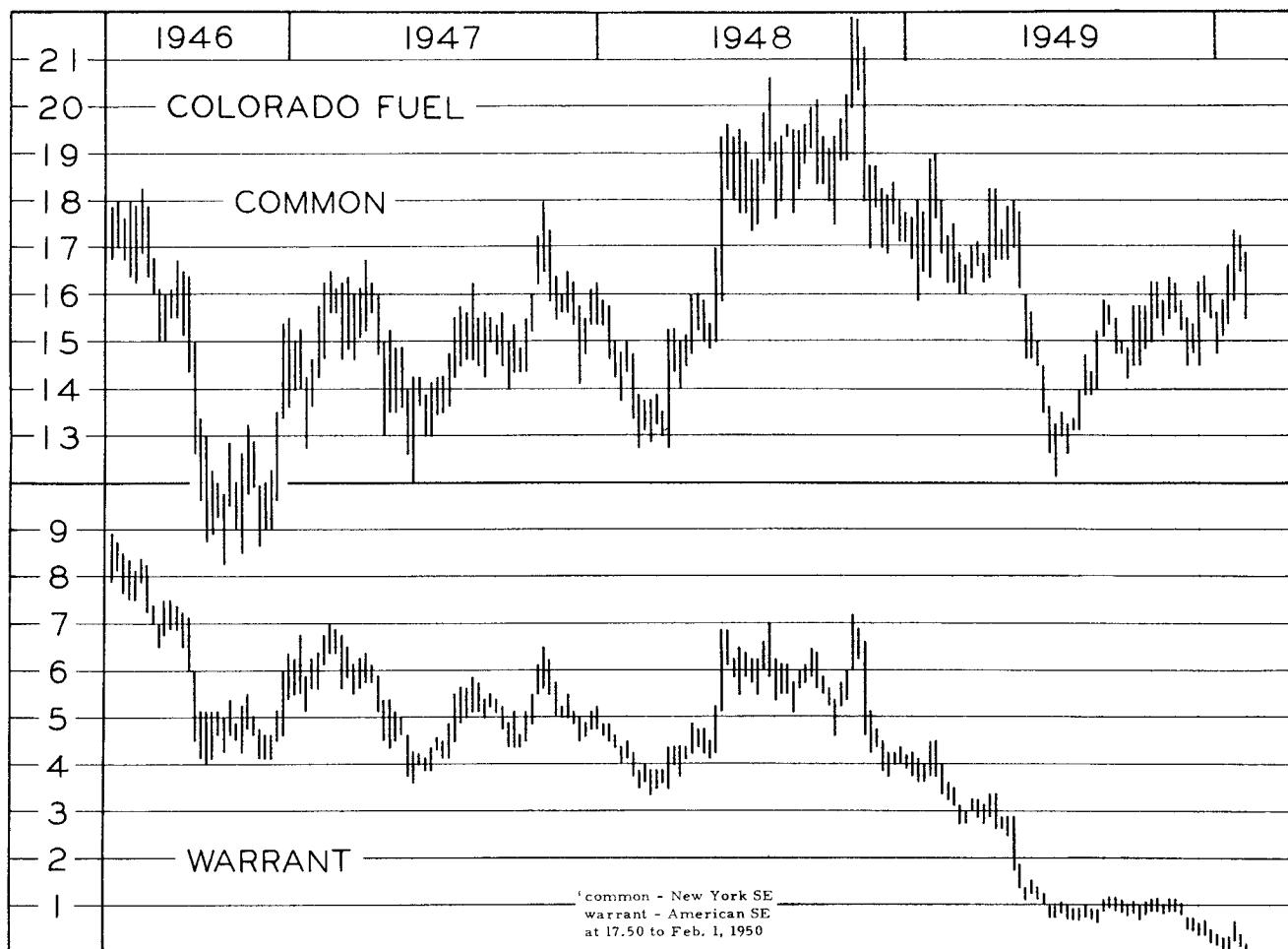
SHORT-SELLING WARRANTS WITH EXPIRATION DATES

A study of short-sale statistics on the New York Curb Exchange (now American Stock Exchange) early in 1949 would reveal a large and growing short interest in Colorado Fuel warrants. This short-selling was, the writer is quite sure, largely professional, and it was based on time-tested and quite logical observations with regard to common stock warrants which are approaching their expiration date.

For those who are unfamiliar with short-selling, a quick explanation is in order. When you sell short, you sell something you don't own in the expectation that it will go down in price. You could, for example, tell your broker to sell 100 Colorado Fuel warrants 'short' at 6. He does this, selling someone the 100 warrants at 6 even though you do not actually own any to sell. The broker will then borrow the 100 warrants from another broker to make delivery to the purchaser in your name. This 'loan' can in most cases be extended a very considerable length of time, during which period you are 'short'.

A successfully concluded short-sale would see Colorado Fuel warrants go down, say, to 1, as they did, whereupon you 'cover' your short-sale by ordering your broker to buy 100 warrants at 1. Your broker will make the purchase but instead of putting them in your account, he will deliver these warrants to the broker who loaned them in the first place and the transaction is concluded. In effect you bought at 1 and sold at 6, even though in this case the sale came before the purchase, and that is all there really is to short-selling.

There are various regulations with regard to short-selling but we need not go into them here. As a practical matter it is usually perfectly easy to go short and stay short as long as you care to. Here is the logic behind selling Colorado Fuel warrants short, and again it is just a matter of 'arithmetic'. In May 1948 Colorado Fuel warrants were selling at 6 while the common stock was selling at 18. The Colorado Fuel warrant was good to buy common stock at 17-1/2 to February 1, 1950, after which date the warrant was due to expire.



Plainly, if you sold 100 warrants short at 6 in May 1948, on February 1, 1950 the common stock must sell at 23-1/2 in order for the warrants still to be worth 6. The \$5.50 premium was being paid in 1948 for the 22 months the warrants had to run. As that time gradually passed, the premium must inevitably shrink until, with the expiration date close at hand, no premium whatever would exist. If Colorado Fuel common were to stay at 17-1/2 or below at the expiration date, the warrants must be worthless and a short-sale at 6 would net the entire \$600 profit. If the common sold somewhere between 17-1/2 and 23-1/2 the profit on the short-sale would vary accordingly. But no loss was possible unless the common stock sold above 23-1/2.

It was also possible to hedge against any spectacular rise in the common by buying, say, 50 shares of common at 18, at the same time the 100 warrants were sold short at 6. In this way, if the common did go to

23-1/2 at the expiration date of the warrant, there would be no profit on the short-sale but there would be a \$275 profit on the rise in value of the common stock from 18 to 23-1/2, plus about \$200 in dividends received in the interval, a total gain of \$475. In this way the common stock could actually go to 33 before a loss would begin to accrue on the short-sale of the warrant at 6 in 1948.

Looking at the reverse of this, if the common stock went down below 17-1/2 when the expiration date of Feb. 1, 1950 rolled around, a \$600 profit would have been made on the short-sale. A loss on the 50 shares of common purchased would also take place, but the common could fall 12 points or down to \$6 a share before any net loss would take place, and this excludes dividends from consideration since in a fall like that the dividend would certainly have been passed.

To recapitulate this typical short-sale of expiring warrants, we have the following:

June 1948 -	100 warrants sold short at 6
	50 shares common purchased at 18

On February 1, 1950, when the warrants were due to expire, here were the two extreme possibilities.

(1) The common has gone to 33. At 33 the warrants are worth 15-1/2 so our short sale at 6 registers a loss of \$950. But our 50 shares at 18 gained 15 points or \$750 while at least \$200 must have been paid in dividends so that 33 represents the break-even point on the upside.

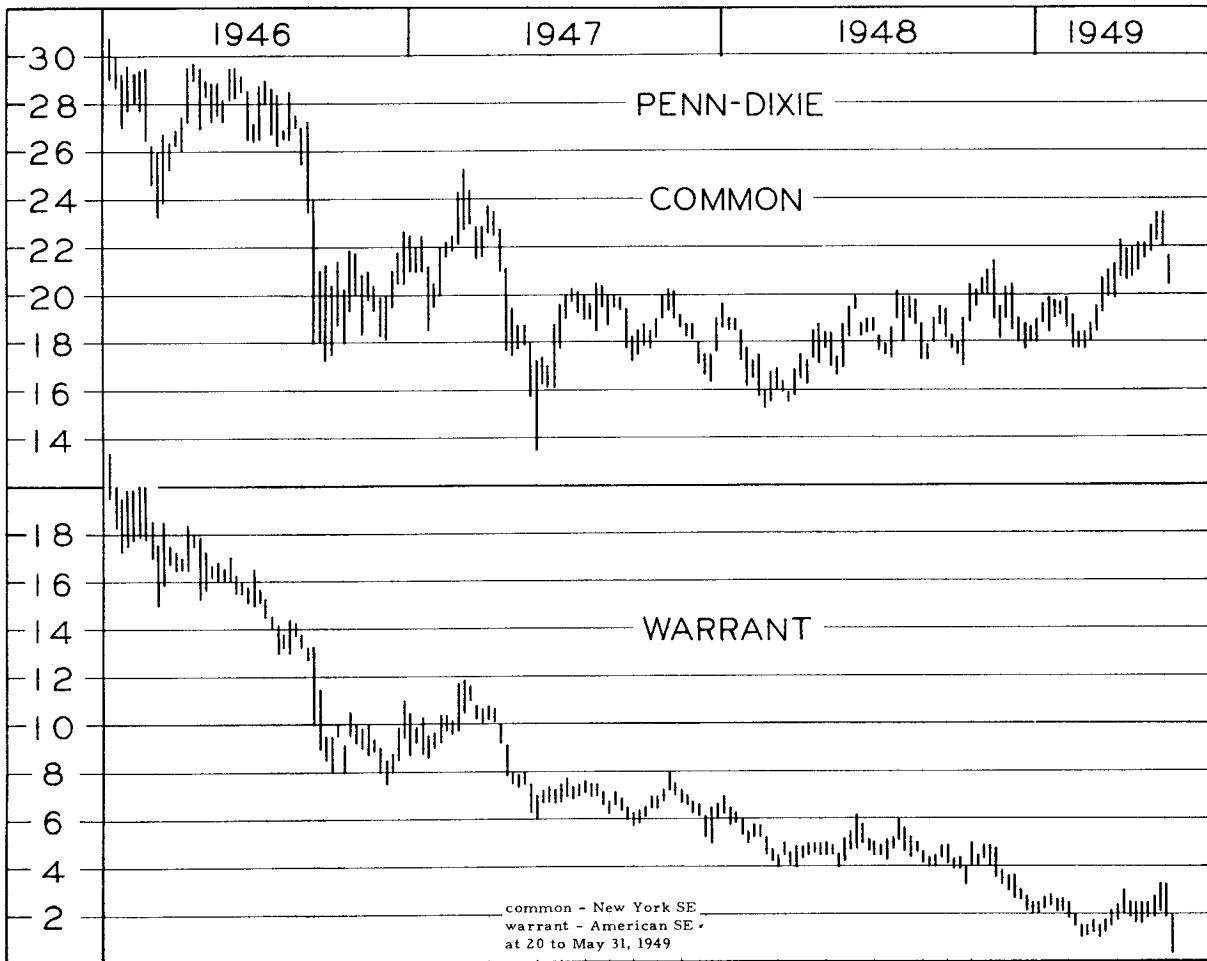
(2) The common has gone to 6. At 6 there is a \$600 profit on the short-sale of the warrants, but our 50 shares bought at 18 has a 12 point loss or \$600, so 6 represents the break-even point on the downside (and some dividends might have been paid so this point might be even lower.)

The interesting and slightly amazing fact is that in selling 100 warrants short at 6 and buying 50 shares of common at 18 in May 1948 as a 'hedge', Colorado Fuel common could have gone up to 33 or down to 6 before any money could have been lost in such a transaction. Any place between those two points represented a profit. Of course, there was no necessity to wait for the expiration date. In May 1949 the common stock was selling at 17-1/2 and the warrants at 2 so that a \$400 profit could have been taken on the short-sale of the warrant and the accrued dividends would have more than covered the \$25 loss on the common.

Short-Selling Penn-Dixie Cement Warrants: To take one further example, in April 1947 Penn-Dixie common was selling at 20 and the warrants were selling at 10. The warrants were good to buy Penn-Dixie at 20 and were to expire May 31, 1949.

May 1947 -	100 warrants sold short at 10
	50 shares common purchased at 20

On May 31, 1949 when the warrants expired, here were the two extreme possibilities.



(1) The common stock has gone to 39. At 39 the warrants are worth 19 so that our short-sale at 10 shows a \$900 loss. But our 50 shares common purchased at 20 shows a 19 point profit or \$950 gain (and we are ignoring about \$125 in dividends). Therefore, 39 represents the break-even point on the upside.

(2) The common stock has gone to 0 (!) At 0 for the common stock we have a \$1,000 profit on our short-sale of the warrant and a \$1,000 loss on our 50 shares common at 20, so 0 actually represents the break-even point on the downside.

In selling 100 Penn-Dixie warrants short at 10 and buying 50 shares of common at 20 in April 1947 as a 'hedge', Penn-Dixie common could have gone either up to 39 or down to 0 before any loss would have been suffered. Actually the warrants expired in May 1949 with the common selling at 21 and the warrants selling at 1. A \$1,000 profit would have been the result. Nor was it necessary to wait for the expiration of the warrants. Several times during the waiting period the transaction could have been liquidated at a substantial profit.

After reading the above paragraphs should there now be any surprise that in the early months of 1949 short-selling of Colorado Fuel warrants became quite noticeable? Short-selling opportunities in warrants may arise at any time but are potentially most profitable during the low-price stock booms which typically characterize the end of a bull market. This writer would recommend that short-sale positions in warrants should almost invariably be hedged in the manner just described because warrants

are too volatile on the upside to sell short by themselves without some danger to one's blood pressure. In addition, there have been several cases in recent years of the extension of warrant privileges when the time had come for the supposed expiration. Since such extensions almost always occur in the last few weeks of the life of the warrant, this danger can be obviated by covering short-sales some months before the expiration date.

HEDGING A WARRANT PURCHASE

Merely saying that in most cases warrants become quite attractive at certain price levels does not mean at all that we are not left with quite serious problems. When a 'cheap' warrant declines by one-third, it represents a loss of one-third of the money invested. Since the risk is so large in so volatile a security this would seem to preclude, for safety's sake, investing a large proportion of one's available capital in warrants.

While that would be true in any case, there is nevertheless something which can be done to increase the safety margin, and, indeed, it does not seem unreasonable to make the claim that one can moderate the risk which is entailed to a considerable degree. In some later pages we shall continue our analysis of Alleghany Corp. warrants with respect to "investment trusts" and "leverage". At this point, however, we wish to consider how a hedge position could be taken in this warrant simply on the basis of our reliable standby -- mathematics.

We will go back to the beginning of trading in the warrant when Alleghany warrants were selling at 75¢ and the common stock at 3. Even though a strong case was possible for the purchase of the warrant on the logical argument of far greater potential profit on the upside than potential loss on the downside, the amount of money so invested in the warrants would have to be tempered by the ease with which half the investment could disappear. In other words, while we have mathematically demonstrated that a \$300 investment in 400 Alleghany warrants at 75¢ must appreciate to \$900 upon a doubling in the common and to \$1,800 upon a tripling in the common, against only a possible \$150 loss should the common decline by 50%, that potential \$150 loss in original investment in the warrants would still be a flat 50% loss. That would (or certainly should) restrain you from investing a large part of your available investment funds in such a warrant opportunity, however attractive the upside potential.

Proper understanding of what can be done with intelligent hedging has the happy potential of decreasing risk and thereby allowing a larger proportion of available capital to be utilized in warrants, with potential profits almost as great on the upside, but potential loss sharply minimized on the downside. This may seem like a large order for our mathematics to prove, but consider the following simple mathematics, when Alleghany common was at 3 and the warrants at 75¢:

(1) Sell 100 Alleghany common short at 3	cost	\$300
(2) Buy 400 Alleghany warrants at 75¢	cost	<u>\$300</u>
Total Investment		\$600

Suppose the common were to drop to 2. We would have a 1 point profit on the short-sale of 100 shares of common, or a \$100 profit. Alleghany warrants could then drop to 50¢, showing a \$100 loss, and it is unlikely that the warrants would sell lower than 50¢ with the common at 2 because all experience with warrants demonstrates that warrants develop greater and greater resistance to fall as they get cheaper in price, and particularly when they get to the \$1 or 'pennies' class.

Suppose the common were to drop to 1. We have a 2 point profit on the short-sale of 100 shares of common, or a \$200 profit. Alleghany warrants could then drop to 25¢, also showing a \$200 loss, and it is again unlikely that the warrants would sell lower than 25¢ with the common at 1.

On the downside, then, with the above position of short 100 shares common at 3 and long 400 warrants at 75¢, the profit on the short-sale of the common would balance out most or all loss in the warrants.

When we look at the upside, let us take the actual figures of the 1955 highs of 11 for Alleghany common and 7-7/8 for Alleghany warrants.

100 shares of Alleghany common sold short at 3 shows an \$800 loss with the common at 11.

400 Alleghany warrants bought at 75¢ are worth a total of \$3,150 with the warrants at 7-7/8. Deduct the \$800 loss on the short-sale and you are left with \$2,350.

Our original investment of \$600 in selling 100 Alleghany common short at 3 and buying 400 warrants at 75¢, could have shown little or no loss on the downside, but appreciated to \$2,650, or 340% on the upside. And the sharp, if not complete, diminution of risk to capital on the downside would have allowed a relatively large investment in such a transaction.

Suppose you wanted to be doubly sure that the risk on the downside was negligible or zero? You might then have considered the following:

(1) Sell 200 Alleghany common short at 3	cost	\$600
(2) Buy 400 Alleghany warrants at 75¢	cost	\$300
Total Investment		\$900

If the common were to drop to 2, there would be a 1 point profit on the short-sale of 200 shares of common, or a \$200 profit. Alleghany warrants could then drop to 25¢ with the common at 2, a most unlikely drop. If Alleghany common were to drop to 1, we would have a 2 point profit on the short-sale of 200 shares at 3, or a profit of \$400 which, of course, would enable the warrants to sell below 0 (!) since the entire investment in the warrants was \$300. Obviously, then, such a drop in the common would show you a net profit, which would probably be the case even at the \$2 mark for Alleghany common.

Looking now at the upside figures of 11 for Alleghany common and 7-7/8 for Alleghany warrants:

200 Alleghany common sold short at 3 shows a \$1,600 loss with the common at 11.

400 Alleghany warrants bought at 75¢ are worth a total of \$3,150 with the warrants at 7-7/8. Deduct \$1,600 from \$3,150 and you are left with \$1,550.

In the latter transaction, with a heavier proportionate sale of Alleghany common, we still saw a \$900 investment become worth \$2,150. 140% had been earned on invested capital with no risk whatever on the downside.

It should be clear by now that when you are dealing with common stock warrants, a sharp pencil and a pad of paper are your major weapons and simple mathematics your field of battle. Of course, the complexities start from this point on. You must make a thorough analysis of the company on which the warrant is a call -- the life of the warrant is of major importance -- and you must even have some opinion as to the direction of the general market. But the ability to be wrong in all of your guesses (or let us be more dignified and call them 'analyses'), and still be susceptible only to gain and not at all to loss, is a rare position indeed to be in where the stock market is concerned. We have seen once more that mathematics are all on the side of the common stock warrant!

* * * * *

WARRANTS AND "THE MARKET"

When we first wrote this study in 1949, we felt it necessary to discuss the possible future direction of the market as a whole because although we are strong believers in analyzing each company as a separate entity without regard to "the" market, once that individual analysis is completed we can profitably attempt to gage market movement as a whole. Hundreds of stocks, and consequently any existing warrants, go up in bear markets, and hundreds of stocks go down in bull markets, but even such contrary moves are affected by any strong general move.

We are leaving intact in the few pages which follow, the words we wrote in 1949 as well as the additional material written in 1951 because we think they serve a definite purpose. Not only do we take pleasure in an economic and market analysis which has been rather fully borne out in the succeeding years, but there is great significance in the fact that what we wrote is still true today, and with increased emphasis.

(What follows below was written in September 1949 for the First Edition of "The Speculative Merits of Common Stock Warrants") :

Somewhere in this little essay on the characteristics and potentialities of common stock warrants it is necessary though hazardous to express some opinion as to what the future action of the securities market might be. . . . In this connection, the central fact today is that security prices are near a four year low with the securities of many of our leading corporations selling for approximately their net quick assets and at dividend yields in some cases of as much as 10%. These figures are even more striking when it is realized that securities represent ownership of factories, machinery and raw materials, and that while a depreciated dollar has led to considerably higher prices for everything else in our economy, security prices themselves are on the average much lower than they were three years ago.

In effect, the investing public is closing its eyes to the past two decades of monetary history in this country. This history, and one deserving of the closest consideration by investors, is summarized in the following statistics:

<u>U. S. Government Expenditures *</u>	<u>U. S. Government Debt *</u>	<u>Total Bank Deposits & Currency *</u>
1929 3,299	1932 19,487	1933 55,171
1933 3,864	1940 42,986	1940 66,952
1935 7,010	1943 136,698	1941 74,153
1936 8,666	1945 258,682	1943 110,161
1937 8,177	1949 256,000	1945 162,784
1938 7,239		1949 170,000
1939 8,707		
1940 8,998		
1941 12,711		
1942 32,397	* All figures in millions, Federal Reserve Bulletin.	
1943 78,179		
1944 93,744		
1945 100,397		
1946 63,714		
1947 42,505		

Between 1933 and 1940, in an attempt to solve the economic crisis by federal spending, we raised the national debt from \$19 billion to about \$39 billion. During the war period, when it has been estimated that at the peak we were spending a billion dollars every four days, our debt soared to a figure of about \$265 billion. A business man spending \$10 for every \$1 he earned would quickly go bankrupt. The government, in selling enormous amounts of bonds to cover its deficits, merely pumped billions of dollars of new money into circulation. The figures above are statistical evidence of the result.

This new money, in great part created out of thin air, was spent by the government mainly for non-consumer goods. The consumer does not buy tanks, guns, planes and uniforms -- but in the making of these goods, government money poured out to every segment of the economy.

The creation of tens of billions of dollars, paid out for production of goods which the consumer could not buy resulted inevitably in a tremendous pressure against the price level. This was the cause of the post-war inflation. Everything increased in price as much as 100% - 200% -- everything, that is, except security prices which went down an average of 30%.

Bank deposits and currency went from \$41 billion to \$170 billion -- Government debt from \$20 billion to \$265 billion -- Government annual expenditure from \$3 to \$42 billion even in 'peace-time' -- Do these have any meaning at all for security prices, or can we wave a magic wand and make them disappear, never to trouble us again? When paper money increases faster than the production of goods, money becomes less valuable and real goods become more valuable. This is a universal law which never has and cannot be repealed.

Yet securities, which represent the ownership of real goods, have gone down in price! Not only have investors closed their eyes to monetary

statistics but they have forgotten that the profligate spending of government funds shows up in the balance sheet of our corporations also. For an example, let us consider the Simmons Co., best known for its 'Beauty-Rest' mattress. Selling at 23 (July 1949) Simmons earned \$19.22 per common share in the last three years alone and paid out \$7.00 per share in dividends in that period. When we take the current assets of the company plus the modest figure the plant and equipment is carried for, and deduct all liabilities including the entire issue of preferred stock, we still have a figure of \$36 per common share.

The market price of this security, then, hardly covers the value of the current assets of the company and takes no account of earning power, dividends or assets! (1956 Note: The Simmons common which sold at 23 when the above was written, paid a total of \$19 per share in dividends since 1949 and sold at a 1956 high of 55). . . . This situation is not confined to the Simmons Co., but is true of many first-rate companies. The inflation we have had in this country in the past two decades represents in the opinion of most financial observers, a permanent addition to the money supply. Nor has this process reached a conclusion by any means. A few newspaper items taken almost at random, give a clue to the future.

From the N.Y. Herald Tribune, Sept. 26, 1949 - News Item - 'States took in 10 billion in '48, spent 10-1/2 billion'.

News Item - 'The United States government provided \$5,169,000,000 in foreign aid gifts and other grants in the fiscal year which ended June 30, 1949'.

From the Wall Street Journal, Sept. 27, 1949 - News Item - 'Foreign Arms aid bill of \$1,314 million was agreed to by Senate-House conference.'

News Item - 'Military Pay raise of \$300 million a year was approved by the Senate'.

Where in 1933 the entire Federal government was run on less than \$4 billion, today our foreign aid outlay alone is more than \$5 billion in one year, and this does not include such new items as the Atlantic Pact and the billion or so of military supplies that goes with it. As we saw above, the individual States themselves spent \$10-1/2 billion in 1948 and the armed forces took about \$15 billion. Billions and more billions!

Nor can we escape the impact of what is happening to the world about us. The Sunday edition of the New York Times likes to print world maps showing the Soviet bloc in black and it is quite evident that a substantial part of the world must already be placed in that category. The bi-partisan foreign policy which effectively unites both Democrats and Republicans in Washington has as its chief goal the prevention of any further advance of that black line. This is the policy of 'containment', of the 'cold war'. There is no question that this 'cold war' will chew up billions of dollars each year for a long time to come. Furthermore, it is obvious that any economic depression in this country would unquestionably accelerate the world-wide leftward drift and it is, therefore, agreed by all concerned in Washington that should such depression become evident, as many billions as are necessary will be spent in an attempt to climb out of the hole. Perhaps all of these billions will prove finally to be in vain but one thing at least is certain - Pump priming and deficit financing are permanently enthroned.

The conclusion is inevitable. We are in a long-term irreversible trend of currency depreciation and there is little doubt in the mind of this writer that the securities market is on the threshold of a dynamic upward surge of security prices to reflect the increased worth of real goods as against the lowered value of paper money

(The following was written as a follow-up for the 1951 edition of "The Speculative Merits of Common Stock Warrants")

What shall we say now, more than two years after the above words have been written? We might take a moment to announce, with what satisfaction we can muster, that currency has depreciated further and security prices have surged upward. But there is little time for this and we must now answer the question as of today -- what next?

Perhaps we may first be allowed to digress, seemingly, and make a general statement. We are living today in a decade, perhaps even a year, which has been seen in history on only a few occasions. Or, to put it another way, if we take the entire recorded history of mankind, covering perhaps 5,000 years, we might not find more decades than we can count on the fingers of one hand when so many fundamental changes were taking place before our eyes. The world is shifting on its axis, taking a new turn -- life will never again be the same in any of its aspects. It is from this standpoint that we approach our problem in August 1951. What do we face here in the United States? What will be the future trend of the American dollar and how will it affect security prices? These are minor questions in the face of truly earth-shaking events and fundamental world changes, but the scope of the subject at hand makes necessary that we so limit it. To this writer, the answers are so glaringly obvious that the debates 'raging' in the summer of 1951 as to 'inflation' versus 'deflation' seem absurd. Let us take merely one thread and follow it through a twenty year maze. In the early 1930's there was born the 'New Deal' and there commenced a vitriolic dispute over 'Keynesian' economics. The professorial disciples of John Maynard Keynes believed that government spending policies could iron out the exaggerated swings of the business cycle. In depressed periods, government could spend more than it received in taxes and 'stimulate' production, employment, prices -- 'deficit financing' in other words -- have we heard that word before? In boom periods, government would raise taxes, restrict spending, cut down on credit and thereby slow the boom down to a walk. What a tempest was raised by this theory. Editorial writers shrieked that this meant the end of American free enterprise. The 'professors' of the New Deal were looked upon as little better than bomb-carrying, bewhiskered Bolsheviks, and when a work-relief program for the country's 10-15 million unemployed was announced to cost the gigantic sum of \$2 billions the outraged cries of our orthodox economic thinkers mounted to a crescendo. Complete and imminent ruin was announced. Mr. Roosevelt was accused of a policy of "tax, spend and elect" and the charge was freely made that the \$2 billion W.P.A. program had bought the election. Apparently \$2 billions could buy a lot in those days!

In those middle 1930's, the entire Federal government was run on about \$8 billions and the national debt was about \$30 billions. Today, in August 1951 we face a \$100 billions Federal budget coming right up to hit us between the eyes and we look up at a towering national debt of more than \$250 billions. Where are the screams of yesteryear? If \$2 billions would ruin us 15 years ago, what will \$100 billions do today? We hear no

screams -- We hear only the titular head of the 'opposition' party announce that the government is moving far too cautiously and slowly in rearming -- that we should have 'full mobilization', 'double' the air force, 'triple' this, 'quadruple' that -- and the bill? Oh yes, the bill -- well, we can't think of that in a time of national emergency. Somehow, even the term 'emergency' has a vaguely familiar ring to it.

What has happened, if the truth were told, is not only that "pump priming and deficit financing are permanently enthroned" but the very Keynesian theories of the New Deal 'Professors' have been taken over lock, stock and barrel by the opposition, the center, the right, the left and just about everybody else in sight. Keynes is now also enthroned, right on top of our mountainous deficit and if a word of reproach is heard now and then, it is merely a Congressman setting his spoken protest into the Congressional Record (at the taxpayer's expense) while he gleefully votes appropriations, pausing only momentarily to count the number of zeroes lest we accidentally slip over into whatever comes after 'billions'.

This writer is more convinced than ever that there is no turning back. Ten years ago you could have said with justice that we had a bear by the tail. Today that bear has grown so much larger and more powerful that if we should now let go, he would turn and rend us into shreds. The Keynesians have indeed ironed out the 'kinks' in the business cycle. They have kicked us upstairs to the top of a war-inspired boom and kept us there so that since 1941 we have had no unemployment to speak of and national income keeps hitting new highs. Oh yes, the 1951 dollar is now down to 45-55¢, as against 1949, but can't we "grow into our national debt" by raising national income still more? Few people realize how widely-received has been this refinement of Keynesianism. As a matter of fact, everyone concerned is deathly afraid of the alternative which would be to deliberately let the balloon burst on the theory that the longer this is delayed, the greater the danger that our "expanding national economy" will burst its mooring and expand in all directions right up to the moon

No, the road ahead is clearly outlined. There may be twists and turns, temporary aberrations, stopping and starting, but this writer believes that most people who hold currency or fixed-income securities have yet to see all the above factors clearly. The logic of events will firmly label as inescapable the rather brutal conditions we have so sketchily outlined. We have said before that in raising so many fundamental questions, the issue of the future of security prices seems of little moment -- but if we do ask the question, then the answer seems also inescapable. When you sell securities you get dollars. Securities represent tangibles, land, factories, goods and machines. Tangibles and dollars are two halves of a see-saw and when one half goes down the other half must go up.

With each passing day, as event after event unfolds, this writer becomes ever more strongly convinced that it is dollars which are in danger and not tangibles. All the points raised have unfortunately but necessarily received sketchy treatment but the limitations of space compel us to rest our case now and the writer can only conclude by saying that he does not look forward with equanimity to discussing history's verdict another two years hence in August 1953. The facts outlined above may produce what will seem to some to be an unhappy result, but there is no good substitute for looking facts in the face. These facts, and their logic, all point in one direction and the reader is invited to study all the evidence

he can find and draw his own conclusions. To this writer, the facts say that the day of the appreciating dollar is gone. The effect of this upon stock market prices has, again, in our opinion, hardly begun to be felt -- the scramble to convert dollars into tangibles is yet in its early stages. (This concludes our quotations from the 1949 and 1951 editions of this study.)

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INVESTMENT TRUST WARRANTS

In any strong upward movement of stock market prices, a combination of the characteristic qualities of investment trust issues in particular and common stock warrants in general can prove particularly advantageous, and we find this combination in the various investment trust warrants. The Atlas Corporation, Alleghany Corp., Tri-Continental Corp., U.S. & Foreign and Investment Co. of America are all investment trusts and there are warrants outstanding in the capitalization of each of these companies. Why do we say that the combination of the warrant and the investment trust can be advantageous?

In the first place, we have seen that warrants, taken as a group, show far greater percentage appreciation on the upside than do their respective common stocks. But since the fate of the individual warrant is tied up with the fate of the common stock it represents an option on, we must keep in mind that even rising markets do not signify the rise of all securities and by that token, of all warrants. The problem of choosing the right security is a vexing problem in all markets.

An investment trust, by definition, holds the securities of many different companies, this being the sole business of an investment trust. An investment trust warrant is, therefore, an option on the future action of a well-diversified group of securities, rather than on any one issue, thus alleviating the difficult problem of choosing one or two good securities. An investment trust issue, because of the broad diversification of its holdings, will almost always move with the general market and an investment trust warrant will move in a corresponding fashion, becoming in effect an option on the general market. The writer will shortly attempt to depict even more striking advantages of investment trust warrants but we must first deal with a basic question -- namely, just what is an investment trust?

The Investment Trust

What are the chief difficulties of an average investor? First, he has neither the training, experience, nor even the time necessary to make a wise choice from among the many investments available to him. Secondly, limited funds and a desire to avoid extra commissions and odd-lot taxes will compel him to concentrate his investments in only a few securities, thereby increasing the danger of having put his money in the wrong industry or the wrong security. Suppose we visualize 10,000 small investors, each with \$1,000 to invest, and each facing the problems outlined above. If they pool their funds they now have a total investment fund of \$10 million. With this sum they can afford to hire some of the better 'brains' in Wall Street to manage this \$10 million investment fund, to provide a diversification of investment, intelligent selection and continuing supervision.

Actually, the process works the other way around. The 'brains' in Wall Street take the initiative, announce they are forming an investment trust and invite small investors to buy shares in their trust. Many investment trusts got their start and became popular in the boom of the late 1920's and surprisingly enough managed to survive 1929. An investment trust, then, is a corporation whose sole business is the investment of its funds in the securities of other corporations. It is visualized, and supposedly had its origin, in response to the investor's need of professional management for his investment funds.

Whether or not investment trusts are, or are not, more successful in their market operations than an individual investor is another story. The point we must understand here is that a trust is merely a pooling of capital which is then invested in a group of securities. This constitutes an investment trust.

The Principle of Leverage

The next concept to grasp, and a most important one, is that of leverage. What is a 'high-leverage' investment trust and what is its significance?

Suppose an individual has \$10,000 to invest and he proceeds to purchase a number of securities with this sum. Assume the securities he holds double in value in a rising market. His \$10,000 is now worth \$20,000 or, as an alternative assumption, a declining market might halve the value of his securities, his \$10,000 becoming \$5,000.

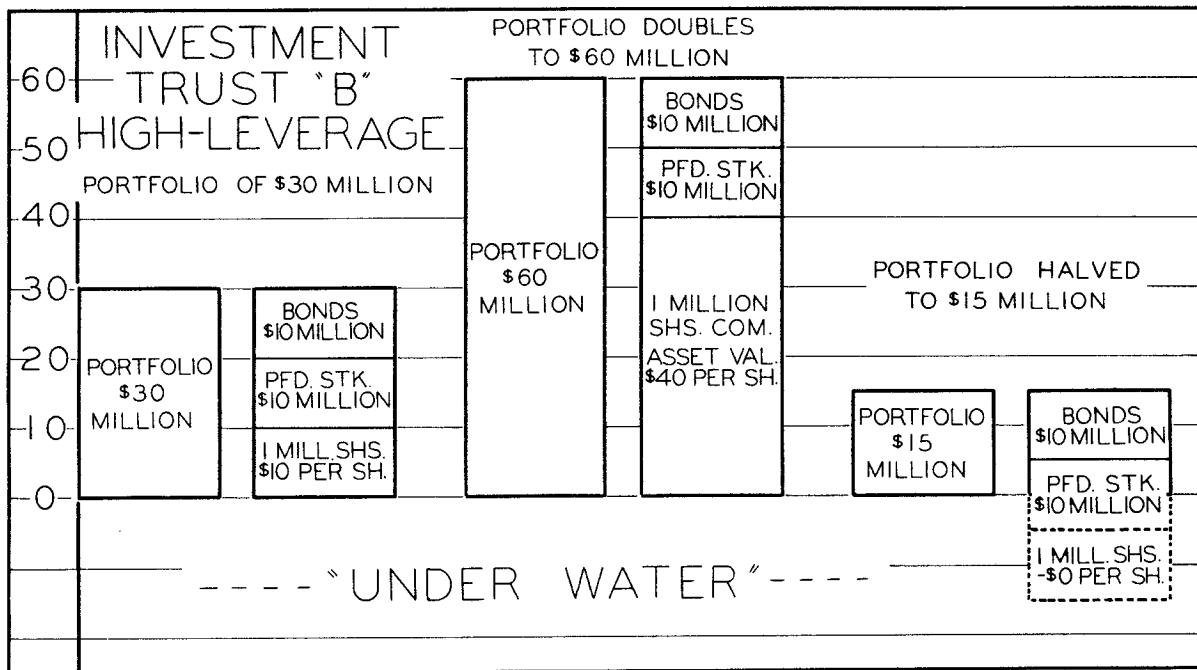
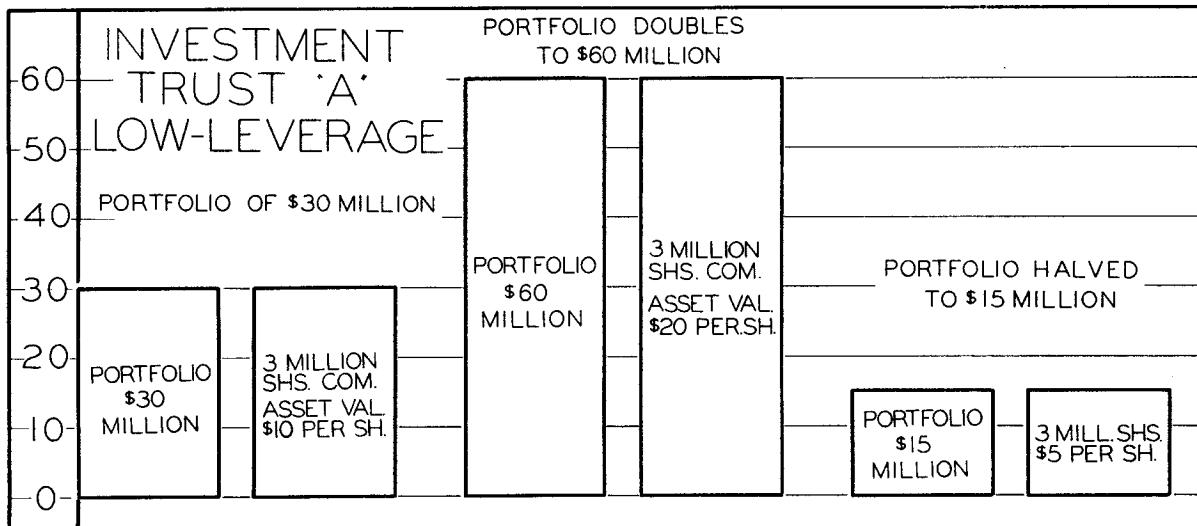
Making a fresh start with our original \$10,000, let us assume that our investor borrowed an additional \$10,000 from whatever source will grant this loan and invests the entire \$20,000. If the investment doubles in value it becomes \$40,000 and our investor can pay off his \$10,000 loan and still be ahead \$30,000. However, if the investment declines to half in a falling market, the \$20,000 will become \$10,000 and our investor pays off his \$10,000 loan and now finds that he is wiped out. By using borrowed money our investor has increased both his chances for greater profit and also, inevitably, for greater loss. The proportion of borrowed money to original capital determines the increased percentage of profit and loss which is possible. It is this proportion which is generally known as leverage. In the case of an individual investor who found it possible to borrow money for the purpose of investment, high-leverage would indicate a large proportion of such borrowed money.

An investment trust is a corporation and a corporation usually borrows money by selling bonds. Such bondholders must receive their interest regularly before all other payments, and repayment of their principal must be attended to in event of dissolution of the trust before other claims are recognized.

Next to borrowed money in the form of bonds, the issuance of preferred stock will also increase the leverage of the common stock. A preferred dividend is next in line after bondholder's interest and must be paid in full before the common stock can get anything. The same is true with regard to claims on assets in event of dissolution. While investment in bonds and preferred stock possesses, as a consequence, much more safety than that inherent in common stock, the other side of the picture is that the possible return to these two classes is limited. That is, in the great majority of cases, no matter how prosperous the investment trust becomes the bond-

holder gets only his prescribed interest and the preferred stockholder gets only his prescribed dividend, and as far as claims on assets go, the claim of the bondholder is only the face value of his bond and the claim of the preferred stockholder is only the assigned liquidating value of his preferred stock. Over and above these definite claims the common stockholder gets all the rest.

To crystallize this explanation let us take two examples. Investment Trust 'A' is a low-leverage investment trust, its capital consisting of 3 million shares of common stock issued at \$10 per share with no bonds or preferred stock outstanding. The \$30 million is invested in securities. A rising market sees the portfolio of securities double in value to \$60 million. (please study the charts below.) A portfolio worth \$60 million -- 3 million shares of stock -- each common share has a portfolio value of \$20, otherwise known as "net asset value per common share", derived by dividing assets applicable to the common stock by the number of common shares outstanding. On the other hand, if a declining market halves the



market value of the portfolio to \$15 million we have a portfolio worth \$15 million, still 3 million shares of stock, so that each common share has a net asset value of \$5.

Investment Trust 'B' is a high-leverage investment trust, its issued capital consisting of \$10 million of bonds, \$10 million of preferred stock and \$10 million of common stock (made up of one million shares of common at \$10 per share.) \$30 million is available to the Trust and this is invested in securities. A rising market sees the portfolio of securities double in value to \$60 million. The bonds still have only their claim on \$10 million, and the preferred stock still has only its claim on the next \$10 million. The remaining \$40 million all belongs to the common stock, making the net asset value of each common share \$40. On the other hand, if a declining market halves the market value of the portfolio to \$15 million the bonds have their prior claim on \$10 million. The preferred stock is next in line for the remaining \$5 million and is \$5 million 'under water', while the common stock has no assets at all applicable to it, but is far 'under water'.

The significance of the above is apparent. Buy one \$10 common share of a low-leverage investment trust and for a move in the market either way its value may go up to \$20 or down to \$5. Buy one \$10 common share in a high-leverage investment trust and the same move in the market either way will see its value go up to \$40 or down to some fraction of a dollar. (It is never really wiped out even though 'under water' because of the possibility of a market recovery.)

The higher the leverage -- that is, the greater the proportion of senior securities ahead of the common stock -- the greater the volatility of the common stock.

ALLEGHANY CORP. (High-Leverage) Versus LEHMAN CORP.(Low-Leverage)

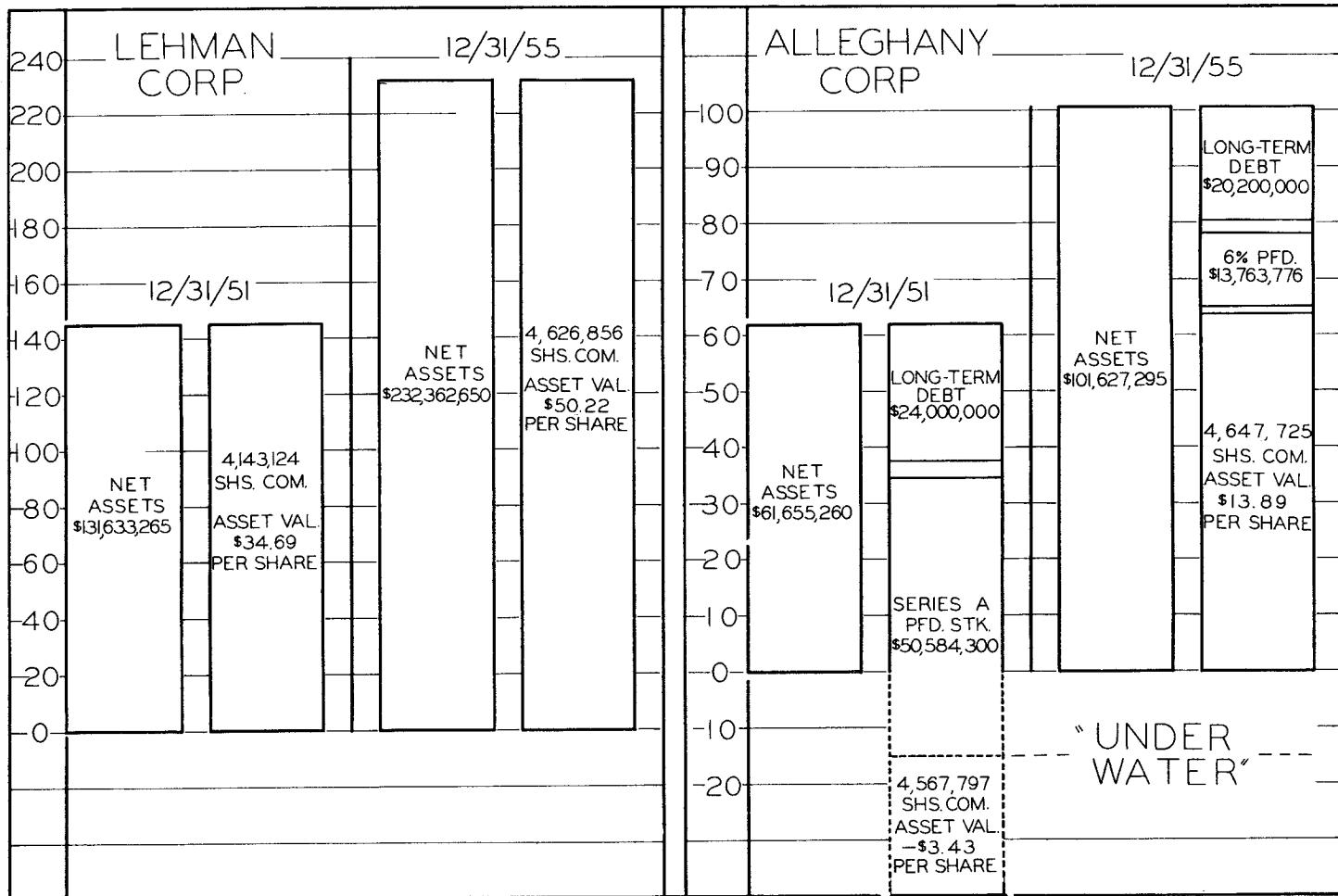
In turning now to two actual examples, we will be telling the rest of the story of Alleghany Corp. The two charts on the next page are quite similar to our two hypothetical trusts "A" and "B" except that corporate capitalizations in real life change sufficiently through the years so that further explanation of the charts are necessary.

Taking the simpler entity first, on December 31, 1951, the balance sheet of Lehman Corp., a low-leverage investment trust (figures adjusted for a 2 x 1 split), looked as follows:

<u>Net Assets</u>	<u>Liabilities</u>
	Sole Capitalization -- 4,153,124 shares
\$131,633,265	common
	Net Asset Value per common share --
	\$31.69

By December 31, 1955, the balance sheet was still a simple affair:

\$232,362,650	Sole Capitalization -- 4,626,856 shares
	common
	Net Asset Value per common share --
	\$50.22



Between 1951-1955 net assets of Lehman Corp. had appreciated from \$131,633,265 to \$232,362,650, up 76%, and the net asset value per common share from \$31.69 to \$50.22, up 58%. Lehman Corp. common stock in that same period had moved from a low of 25-1/2 to a high of 47-1/2, up 86%.

Going now to Alleghany Corp., a high-leverage investment trust, on December 31, 1951, the balance sheet looked as follows:

<u>Net Assets</u>	<u>Liabilities</u>
\$ 61,655,260	Long-term debt \$24,000,000
	32,256 shares prior pfd. conv. stock entitled to \$50 per sh. plus \$35.62 per sh. dividend arrears 2,761,920
	236,744 shares 5-1/2% pfd. Series A, entitled to \$100 per share plus \$113 per sh. dividend arrears 50,584,300
	Total Liabilities \$77,346,220
(Deduct) (Leaves)	Net Assets 61,655,260
	Deficit \$15,690,960

\$15,690,960 was necessary to satisfy the prior claim of the senior

securities ahead of the 4,567,797 shares of common stock, so the common was that much under water, or with a negative asset value of \$3.43 per share.

By December 31, 1955, much had happened under the astute leadership of Robert R. Young. Mr. Young had sold off many of Alleghany's smaller holdings at substantial profits and the major current holdings, Investors Diversified Services, New York Central and Missouri Pacific, together with other assets, minus negligible current liabilities, were worth \$101,627,295. In addition, and of even greater importance, a good deal of further work had been done to reduce the claims of the senior securities ahead of the common stock, all legacies from the Van Sweringen past.

100,000 shares of Series A preferred had been exchanged in the previously described recapitalization for \$10,000,000 face amount of 5% bonds, plus 2,000,000 warrants. On December 31, 1951 these 100,000 shares of Series A had been entitled to \$100 per share plus \$113 per share in dividend arrears, or a total of \$21,300,000. This large claim ahead of the common was thus reduced to only \$10,000,000 as long-term debt, while the warrants were behind the common, not ahead of them. In 1953 some 25,000 shares of \$2.50 prior preferred were exchanged for a new \$4 prior preferred, thus eliminating dividend arrears of about \$750,000. Then, in 1955, the balance of the 5-1/2% Series A preferred was offered an exchange of 1 share Series A preferred for 10 shares of a new 6% convertible preferred stock. The attraction of this was a higher dividend rate and an excellent conversion feature not possessed by the Series A stock. The acceptance of the exchange by almost 100% of the Series A stockholders resulted in the elimination of about \$18 million in dividend arrears. The over-all results were as follows, as shown in the previous chart and in the figures of the December 31, 1955 balance sheet:

<u>Assets</u>	<u>Liabilities</u>
	Long-term debt \$20,200,000
	25,262 shares \$4 conv.
	prior preferred entitled
	to \$80 per share 2,046,222
\$ 101,627,295	1,323,440 shares 6% conv.
	preferred entitled to
	\$ 10.50 per share 13,763,776
	4,400 shares 5-1/2% "A"
	preferred 1,058,933
	Total Liabilities \$37,068,931
	Net Assets \$101,627,295
(Deduct)	Total Liabilities 37,068,931
(Leaves)	\$ 64,558,364

The net assets of Alleghany Corp. by December 31, 1955 were sufficient to cover the sharply reduced claims of the senior securities and leave \$64,558,364 applicable to the 4,647,725 shares of common stock outstanding, or a net asset value of \$13.89 per share.

For Alleghany Corp., net assets had moved between 1951 - 1955 from \$61,655,260 to \$101,627,295, up 64% or considerably less than Lehman's Corp. 76% advance. But the effect on Alleghany's common stock was

dramatic, as the increase in asset value plus reduction in claims of senior securities took the net asset value from an "under water" negative \$3.43 per share to a plus \$13.89 per share net asset value. Alleghany common, in that same period, moved from 2-5/8 to 11, up 318% against the 86% move for Lehman Corp. common. Thus -- high-leverage versus low-leverage.

The Alleghany Corp. WARRANT

A common stock warrant is itself an example of "leverage" because the warrant, a low-priced security, must reflect the movement of a relatively high-priced stock on which it is a call. In some instances, a 10% move in the common stock can cause a 50% move in the warrant, which would mean that the warrant was moving 5 times as fast as the common. When we superimpose a warrant, therefore, on a high-leverage common stock we would expect to find something of great interest and exceedingly high potential. These qualities were demonstrated by the Alleghany Corp. warrants as we have already demonstrated. Readers will recall that when Alleghany warrants moved from 75¢ to 7-7/8, this represented a 950% advance. During the same period 1951-1955 (with the warrant making up the handicap of a late start!) (1) Lehman common appreciated 86%; (2) Alleghany common appreciated 318%; and (3) Alleghany warrants appreciated 950%. This was a perfectly logical series of moves for (1) a low-leverage investment trust common stock; (2) a high-leverage investment trust common stock; and (3) a warrant on a high-leverage investment trust common stock.

Warrants In A LOW-Leverage Investment Trust

The action of Atlas Corporation warrants in recent years is an excellent example of how a fast-moving warrant can overcome the lethargic habits of the common stock of a low-leverage investment trust. Atlas Corp. under Floyd Odlum has had a remarkably successful history but there is no gainsaying the recent slowness of the common stock when compared to something like Alleghany Corp. or Tri-Continental.

<u>Atlas Corp.</u>	<u>Net Assets</u>	(12/31/51)	<u>Liabilities</u>
	\$67,460,774	Sole Capitalization -- 1,783,110 shares common	
		Net Asset Value per common share -- \$37.83	
		(12/31/55)	
	\$82,552,981	Sole Capitalization -- 1,712,035 shares common	
		Net Asset Value per common share -- \$48.22	

Reflecting the somewhat small 27% advance in net assets between 1951-1955, the common stock of Atlas Corp. moved from its 1951 low of 25 to a 1955 high of 48-3/4, an advance of 95%. This was quite enough for the warrants, the perpetual right to buy stock at \$25, to move from a 1951 low of 5-1/4 to a 1955 high of 24-1/4, an advance of 361%, a move that was almost four times so fast as the common, demonstrating once again that in

a rising market arithmetic is on the side of the warrant. Late in 1956 some fundamental changes appeared in Atlas Corp. Some subsidiary companies were gathered under one corporate roof, the common stock was split four for one and the same four for one treatment was accorded the warrants. Each warrant is now the perpetual right to buy 1 share of Atlas common at \$6.25 per share and a little leverage has been created by 1,466,667 shares of \$20 par 5% preferred stock. The Atlas Corp. warrants should be of continuing interest and will reflect to a considerable degree how correct Mr. Floyd Odlum has been in placing so much emphasis on the potential profits in uranium mining.

Some Other Investment Trust Warrants

In the comprehensive list of current warrants of interest towards the end of this study, readers will find listed Tri-Continental and Investment Co. of America. These are investment trusts and have warrants outstanding.

Tri-Continental Corp. warrants got a great deal of attention in the 1951 edition of this study. At that time the common stock was as low as 10-5/8 and the warrants at 2-1/2. In 1955 the common reached a high of 28-1/4 and the warrants a high of 14-1/8. Thus, the common stock advanced 165% and the warrants 465% between 1951-1955. We find these figures very interesting because on page 40 of the 1951 edition we stated the following possibility: "Thus, a hypothetical 100% increase in asset value would presumably cause a 190% rise in the price of Tri-Continental common stock, coupled with a quite automatic 554% advance in Tri-Continental warrants." (original emphasis). As a matter of fact the net asset value of Tri-Continental common at year - end 1951 was \$26.20 per share, and at year-end 1955 was \$49.44 per share, up 88%. Comparing the 1951 hypothesis with 1951-1955 reality we get:

	<u>Increase In Net Asset Value</u>	<u>Appreciation In Common</u>	<u>Appreciation In Warrant</u>
1951 Hypothesis	100%	190%	554%
1951-1955 Reality	88%	165%	465%

We are not presenting these figures to enhance our reputation as a market forecaster, but to demonstrate again the very important place that mathematical logic plays in analyzing the common stock warrant. The considerable advance in the Tri-Continental warrant, coupled with the lessening leverage as the company's portfolio increased in value has made it a far less spectacular part of the warrant picture than it was in 1951. Nevertheless, this perpetual warrant always becomes interesting on market dips, and its active career on the American Stock Exchange deserves to be followed closely.

Investment Co. of America warrants make a fascinating story and will enable us to enlarge upon several important points with regard to securities in general and warrants in particular. To begin with, the already-mentioned Alleghany Corp., Atlas Corp. and Tri-Continental Corp. are "closed-end" investment trusts while Investment Co. of America is an "open-end" investment trust, popularly known as a "mutual fund". What is the difference between the two types of investment trusts? A closed-end

investment trust, such as Atlas Corp., has a capitalization similar to that of any industrial company. There are a fixed number of shares outstanding in the various classes of bonds and stocks, and if the company wishes to change its capitalization by, for example, issuing more common stock, the same procedure must be followed as by any industrial company with public ownership. An open-end fund, on the other hand, has its outstanding stock expanding continuously as the salesmen of the open-end (or "mutual") fund are successful in securing orders, and the new stockholders as their entering price pay the current net asset value of the trust plus a rather substantial additional sum of at least 6% in most cases to cover costs and allow a profit margin to the firm whose salesmen sold them the mutual fund. If you wish to sell your shares in a closed-end trust you sell them on the open market at a price subject to supply and demand, the same factors which determine the price of any other stock or bond. Thus, Tri-Continental common closed at 27-3/4 on August 14, 1956, and that is how much the person making that last sale received, even though the "net asset value" of Tri-Continental common was over \$40 on that date.

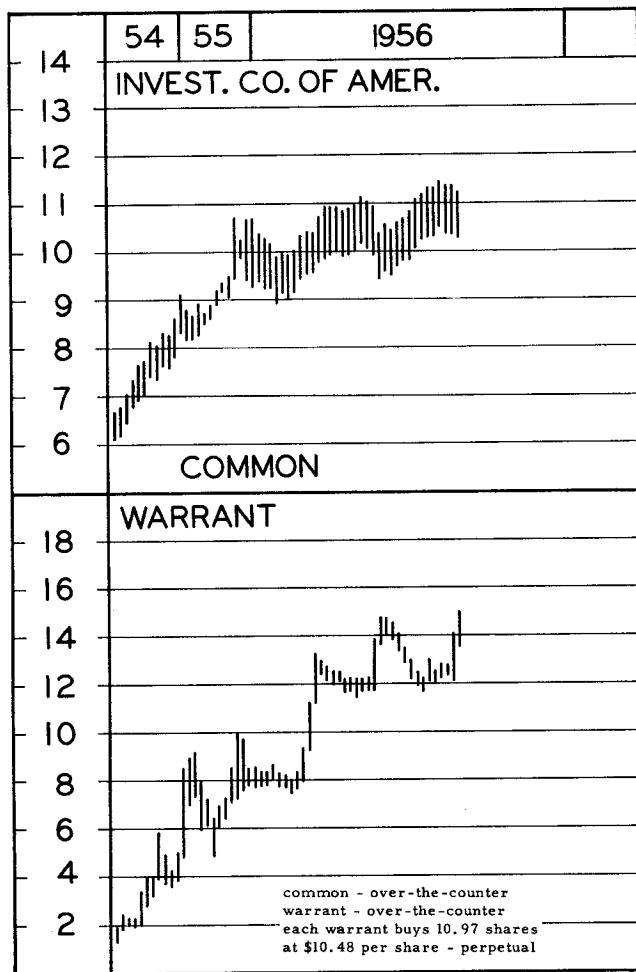
With an open-end mutual fund, however, you cash in your shares at your volition at any time, and receive the current net asset value. On that same August 14, 1956, Investment Co. of America was quoted at \$10.41 bid - offered at \$11.38. This means that the net asset value of the company, market value of all securities held, plus cash, minus all liabilities, was actually \$10.41 per share, and that is what you would receive if you wanted to turn your holdings in for payment. If you wanted to purchase additional shares, however, you would pay \$11.38 per share, the higher price representing the inclusion of the "loading charge" previously mentioned.

We come now to another important point, an explanation of how the Investment Co. of America warrant became the seemingly peculiar right to buy 10.97 shares at \$10.48 per share, without time limit. This explanation will be generally applicable to all warrants which are 'protected against dilution', that is, whose purchase right is fully adjusted when the number of common shares outstanding is affected by stock split or stock dividend.

To continue with a most interesting story, in December 1933, the Investment Co. of America (Michigan) was reorganized and became the Investment Co. of America (Delaware). Each share of the preferred stock of the Michigan company received one share of the new Delaware company, and each common share of the Michigan company received one warrant perpetually good to buy new common stock at \$115 at any time. The warrants were fully protected against dilution by stock splits and stock dividends. When Investment Co. of America, therefore, paid a stock dividend on Dec. 23, 1936 and paid a 100% stock dividend in 1938, the terms of the warrants had to be adjusted. Instead of each warrant being the right to buy one share at \$115 per share, each warrant became the right to buy 2.194 shares at \$52.41 per share. Let us see why this had to be the case to fully protect the rights of the warrant holder.

Assume a company with 1,000,000 shares of common stock outstanding, and with 100,000 warrants also outstanding giving the perpetual right to buy one share of common stock at \$20 per share. The board of directors propose and the stockholders approve a 100% stock dividend which increases the outstanding number of common shares from 1,000,000 to 2,000,000. Is it enough to change the provisions for the warrants so that they are the right

to buy one share at \$10 per share instead of the former \$20 figure? The answer is no, because if the warrant holders had previously decided to exercise their warrants and receive 100,000 shares of common stock, they would have owned slightly less than 10% of the outstanding common when there were 1,000,000 shares of common stock outstanding. To double the outstanding common to 2,000,000 shares, and then allow the warrant holders to still only receive 100,000 shares upon exercise of their warrants would mean that the warrant holders would be left with less than 5% of the outstanding common. To maintain the relative position of the warrant holders, therefore, the right of the warrant had to be changed to being able to buy 2 shares at \$10 per share, instead of 1 share at \$10 per share, when the outstanding common was doubled by a 100% stock dividend as in the above example.



On November 28, 1949 Investment Co. of America paid another stock dividend, one of 250%. With this development the warrants underwent further transformation and became the right to buy 5.485 shares at \$20.96 per share without time limit. And to bring the story up to date, another 2 for 1 split took place on January 29, 1954, making the warrants the perpetual right to buy 10.97 shares of stock at \$10.483 per share. This served to create some startling arithmetic and some simple calculations will indubitably show that once the bid price of Investment Co. of America stock advances beyond the \$10.483 figure, each \$1 advance beyond that figure will add \$10.97 to the value of the warrant. Suppose, for example,

that the stock was \$11.483 bid. One warrant could be turned into the company and for payment of \$10.483 per share one would receive 10.97 shares. Since the 10.97 shares could be immediately turned back to the company at the bid price of 11.483 per share, a 1 point profit on the 10.97 shares would result. Here are the further figures of the worth of the warrant for each point advance in Investment Co. of America stock.

<u>Bid Price of Stock</u>	<u>Worth of Warrant</u>
\$ 10.483	0
11.483	\$ 10.97
12.483	21.94
13.483	32.91
14.483	43.88
15.483	54.85
.....
20.00	109.70

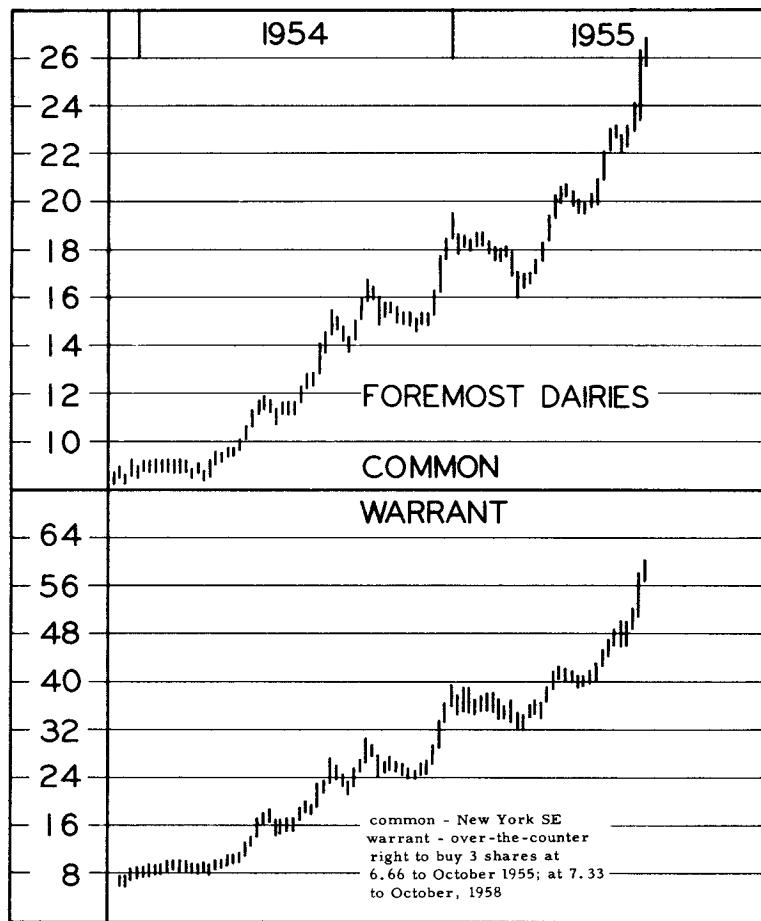
There is no doubt that every point advance in the bid price of Investment Co. of America, once it has reached \$10.48, will add almost \$11 to the value of the warrant, and that if the stock sold at 20 the warrant would be worth a startling \$109 (!). However, it should be pointed out that Investment Co. of America follows a policy of paying out as dividends almost all income received during the year as well as capital gain accruing from sale of securities in the portfolio so that this factor will appreciably slow down the ability of the stock to advance quickly in any market other than the type of bull market we have seen in 1955-1956. Nevertheless, this volatile warrant has had a fascinating past and may well have an equally fascinating future. This right of one warrant to purchase more than one share of stock is itself a form of leverage. Thus, between 1954-1956 Investment Co. of America stock moved from about 6 bid to 10.40 bid, an advance of 73%, while the warrants in that same period advanced from 1-1/2 to 15 in the over-the-counter market, an advance of 900%. The warrant had advanced more than 12 times as fast as the common!

Other Warrants With 'Multiple-Purchase' Privileges

Having concluded our study of outstanding investment trust warrants we may briefly describe two additional warrants which were affected by stock splits and stock dividends, and discuss the manner in which 'leverage' worked for them.

In November 1953 the Foremost Dairies Co. issued warrants in connection with the acquisition of certain properties, the warrants being the right to buy stock at \$20 per share to October 1955 and at \$22 per share to October 1958. These warrants were fully protected against dilution, and when Foremost Dairies split 3 for 1 in September 1954, each warrant became the right to buy 3 shares of stock at \$6.66 per share to October 1955 and 3 shares of stock at \$7.33 per share to October 1958 when the warrants would expire.

Foremost Dairies thereupon proceeded to make a spectacular upward run as shown on the chart, with the common moving from an adjusted price of 9 to a price of 26-3/4 in August 1955, up 197%. The warrants followed along at a much faster pace. Since each warrant was the right to buy 3 shares of stock at \$6.66 per share, the following transaction could take place. Turn in one warrant to the Foremost Dairies Co. and receive 3



shares of common stock for a total payment of \$20 (3×6.666). Sell the 3 shares in the open market for \$26.75 each, receiving \$80.25, representing a net profit of \$60.25. That is why the warrants sold at 59 when the common sold at $26\frac{3}{4}$. At the same time the common was moving from 9 to $26\frac{3}{4}$, the warrants moved from 7 to 59, an advance of 742% as against the 197% advance in the common.

Our final example, the Merritt-Chapman & Scott warrant, had a history dating back to 1929 and we shall not recount it here. Suffice it to say, the warrant started out as the perpetual right to buy 1 share for \$25 per share and ended up as the right to buy 1.84 shares for \$26.35, or about \$14.32 per share. An article in the New York Times of February 5, 1954, appropriately entitled "Higher Mathematics", concluded as follows: "Merritt-Chapman's warrants, which are traded on the American Stock Exchange, closed last night at $29\frac{3}{4}$, nearly three times their best 1929 price and 59,400 per cent higher than their depression low of 5 cents." A theoretical \$100 investment in the warrants at the 5¢ low in 1932 was worth \$59,500 at the above high! And a glance at our statistical tables shows us that the Merritt-Chapman & Scott warrants traded at 25¢ in 1942, up to \$12.50 in 1946, back to \$2.75 in 1949 and up again to \$30 in 1954. Though we are certain that no one was fortunate enough to buy at a particular low and sell at the high, it is equally certain that there was a great deal of opportunity for both profit and loss between those figures.

* * * * *

Author's Note: The following two sections, entitled "The High-Leverage Warrant As A Risk Substitute" and "The Common Stock Warrant As A Trading Medium" were both originally written for the 1951 edition of this study, using Tri-Continental as the illustrative example. Since that time Tri-Continental has moved into a higher price area and can no longer be as effectively used for the purposes described below. However, the principles remain the same and readers will find in the comprehensive warrant list at the end of the study, some excellent replacements.

* * * * *

The High-Leverage Warrant As A Risk Substitute

There is one important use that can be made of a high-leverage warrant such as Tri-Continental at any level in the market and that is as a risk-substitute. Such uses are so obvious that they almost suggest themselves, but they are never more useful than when the market has already enjoyed a considerable advance. It is at such a time, when one may have large paper profits that the thought insistently intrudes -- "Why not sell now, be satisfied with an already large gain, and let the next fellow try to catch the top of the market?"

This sounds like marvelous logic and would be unanswerable except for the fact that another thought forces its way into the picture -- "Suppose the market is just on the threshold of a very powerful move? Suppose we exchange our securities for currency and then watch the worth of currency (its purchasing power) slide still further, while the stock market continues to climb?"

The partial answer which the high-leverage investment trust warrant might contribute is bound up with the particular propensity of an individual warrant to move faster than the general market. In the hypothetical examples we will now cite, we must remember that none of the figures could possibly approach exactness. We are interested only in explaining a principle and the figures which follow are in no sense a forecast.

Having delivered ourselves of this reservation, let us now recall that a 100% rise in the general market would see a hypothetical 190% rise in Tri-Continental common and a 554% rise in Tri-Continental warrants. To put this into numbers, let us consider that you have a \$10,000 investment in a diversified list of securities. Should the market ascend so nicely that your \$10,000 doubled and became \$20,000, the same \$10,000 invested in Tri-Continental warrants would hypothetically become worth \$65,400.

Now, let us return to the starting point and assume that you are greatly concerned over the safety of your \$10,000 investment but do not wish to be left out of any possible market surge that might come (admitting, in other words, the fallibility of your own judgement). Suppose you sold your list of securities, realizing your \$10,000 equity, put \$7,500 in the bank and invested the remaining \$2,500 in Tri-Continental warrants. The 100% rise previously envisaged would bring a 554% advance to the warrants, making our \$2,500 worth \$16,350. Add this to the \$7,500 safely banked and you have \$23,850. You received as much appreciation in capital as if you had risked the entire \$10,000 in a list of securities, and instead you had risked only \$2,500. Should the market have declined sharply, the \$2,500 in Tri-Continental warrants

could have lost half its value without overly disturbing you and the remaining \$8,750 could then have been used to pick up a lot of excellent securities at bargain prices.

The above reasoning undoubtedly has several dubious features. In the first place (and this is really another argument in favor of the warrants), many investors show a positive genius for investing \$10,000 in a list of securities and then seeing all these selections go down while the market merrily bubbles and boils. In the second place, the 554% appreciation figure for the Tri-Continental warrants on a doubling of the Tri-Continental net asset value could turn out to be somewhere around 354% or 754%. We must again disclaim any intent to formalize the above figures into anything as presumptuous as a 'forecast', but the one thing which is quite certain is that the above concept has substantial validity. If you have X dollars invested in a list of securities and you feel doubtful as to the safety of the general market a high-leverage investment trust warrant such as Tri-Continental might help you hedge against possible errors in judgement either way.

Sell your securities, take the X dollars you receive and then put 1/4 of X or 1/3 of X, or 1/2 of X into such a high-leverage warrant. We leave it to the reader to puzzle over the particular percentages which might then seem wisest -- but the principle expounded above is undoubtedly sound and could well be kept in mind. It could prove useful at many difficult stages of the market cycle.

The Common Stock Warrant as a Trading Medium

At one time, to everyone with a really awakened interest in the stock market, there comes the interesting thought -- "Why shouldn't it be possible to observe carefully the fluctuations of individual stocks and then trade these stocks for a point or two on some pre-determined mechanical basis?"

Such an idea always seems to have a good deal of essential logic. It is suggested usually, by the following pattern: You hopefully buy, say, 100 shares of Eastman Kodak (EK) at 44. Ruefully, you watch it decline to 41, reflecting that with a few weeks patience you could have purchased it three points cheaper. Hopefully, you watch it climb back to 44, sink again to 41, rise once more and break through to 47. At this point, you have the impression that you can "really pick them", until EK suddenly turns around and races back to 44, leaving you exactly where you started. This process may have consumed 6 months and the above large fluctuations were no doubt interlaced with minor fluctuations where Kodak shuttled back and forth a few points at various levels.

Thus -- the idea takes firm root -- commission and taxes for buying and selling 100 shares Eastman Kodak (1951 figures throughout) amount to a total of approximately \$65. If you get a 2 point profit on one quick trade, it represents a net profit of \$135. Using a 75% margin basis, only 3 such turns will yield about a 12% return and if Eastman Kodak stays in a trading range for a whole year, who knows how many trades can be made? No sooner have you enthusiastically embraced this marvelous concept than problems begin to arise. We are agreed upon striving for a 2 point profit in Eastman Kodak, but if we have X amount of dollars available, what trading range shall we attempt to straddle? Suppose we divide our money so as to

buy EK every point down from 47 to 43 and then EK suddenly and quite without precedent, drops to the middle 30's? You are fully invested and firmly locked in. On the other hand, EK may shoot up to the 50's and stay there, leaving you with the problem of adjusting your money to another trading range.

Now, to anyone who looks upon the securities market as a fascinating chess game, the above problem would seem worth tackling and would certainly be of absorbing interest. Many devices have been explored in the past, such as the stop-loss order and various types of pyramids, too many to mention here. All of this may some day prompt the writer to do a full-length study of "short-term trading", but let us not forget that we are restricting ourselves to one field in these pages and so let us quickly consider the unique value of the common stock warrant as a trading medium.

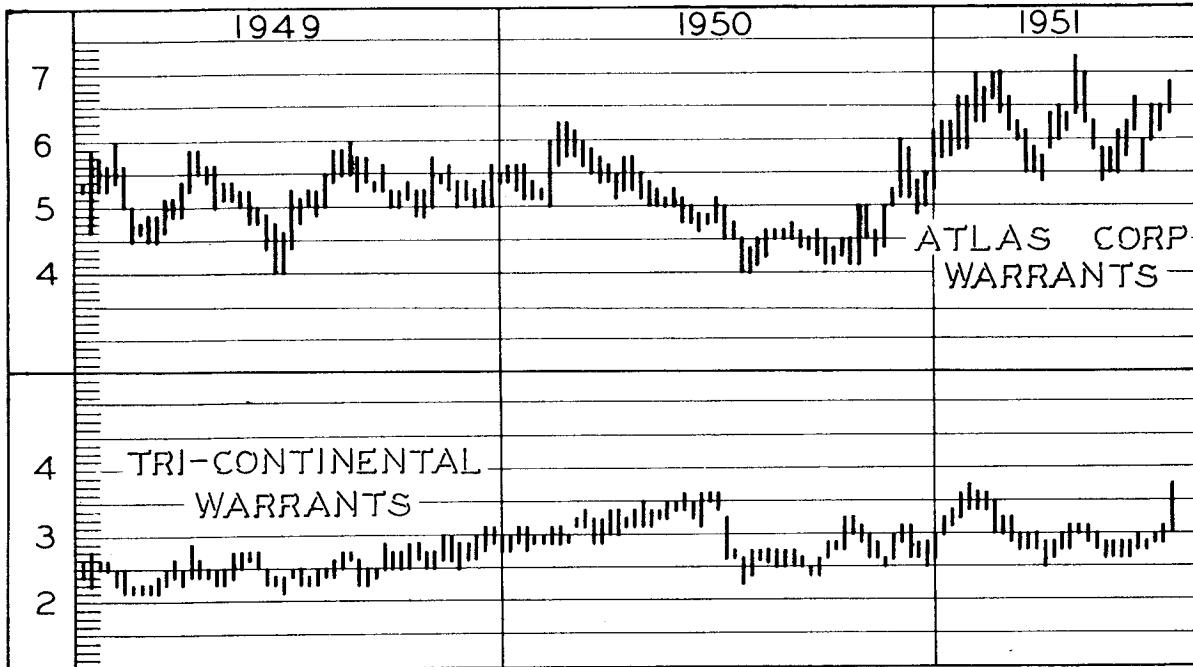
The most significant feature of the warrant is that it has no life of its own but rather mirrors the movement of its common stock. Thus, the Tri-Continental warrant in the preceding years has been a \$3 warrant tied to a \$10 stock and the Atlas Corp. warrant has been a \$5 warrant tied to a \$23 stock, taking some roughly approximate average prices. Let's consider one fact about the Atlas Corp. situation. If Atlas common doubled in price and went from 23 to 46, the warrant, being the right to buy common at 25, would be worth \$21 a warrant.

23 to 46 is a 100% appreciation
5 to 21 is a 320% appreciation

Thus, on the upside, the warrant would enjoy 3 times as much appreciation as Atlas common. Suppose Atlas common declined to 11-1/2, a decline of 50%? On the basis of market history, the Atlas warrant would almost certainly sell no lower than 2-1/2, also a decline of 50%. We are reiterating again the interesting concept of the warrant which, at the strategic price and time can offer so much greater reward than risk. Let us also recall the automatic premium which every low-priced security commands. No one knows this better than the stock market professional who has come in contact with a diversified group of investors. The \$3 or \$2 stock has an enormous speculative appeal based solely on the price, regardless of intrinsic value. When you couple the actual value of a warrant with a low price, its appeal becomes almost irresistible and it should occasion little surprise therefore, that some warrants will develop a typical base in a broadly fluctuating market, at which base tremendous resistance to further decline evidences itself. Thus, the Atlas warrant in the 4 - 5 range and the Tri-Continental warrant in the 2 - 3 range are in a perfectly situated trading range. That is, when their respective common stocks move up, a powerful lift is exerted on the warrant because of its great leverage, while when their common stocks move down, the resistance of the warrant to further decline becomes ever greater as the base level is approached.

The appended charts giving the price ranges for Atlas Corp. and Tri-Continental warrants from 1949-1951 are useful in understanding the figures which follow. Throughout the entire period 1946-1951, excluding only the 1946 top, both warrants have been in a 5 year trading range.

To demonstrate the trading potential of these warrants we are now going to present an example. The writer does not suggest that the procedure to be outlined should be followed -- we are again highlighting a principle which might easily be transformed into an opportunity.



Take the Tri-Continental warrant chart and follow a simple pattern from beginning to end -- buy 100 warrants every 1/8 down and immediately earmark each purchase to be sold out 3/8 of a point up. Now, the N.Y. Curb commission on a purchase or sale of a \$2 stock is \$8 and of a \$3 stock is \$9 (per hundred shares). There is no state tax on a warrant (another excellent feature when trading warrants) so only a Federal tax of 5¢ per hundred is paid. The average cost in and out, therefore, including two commissions and tax would be \$17.05 per hundred. On each trade, then, we have left a 3/8 profit, or \$37.50. Deducting the total expense of \$17.05 we have left a net profit on each trade of \$20.45.

In the first week (first line on the weekly chart) we would buy 100 at 2-1/2 and 100 at 2-3/8 (every 1/8 down remember). The next week, the decline continued, so we purchased 100 at 2-1/4. Then a rally set in and Tri-Continental warrants went up to 2-3/4. On the way up we sold the 100 costing 2-1/4 at 2-5/8 and the 100 costing 2-3/8 at 2-3/4 (selling every 3/8 up, remember). Since the highest price reached on the chart at this point was 2-3/4, we would buy 100 at 2-5/8 when the market slipped back but not at 2-1/2 since we already owned 100 at that price. Two weeks later we buy 100 at 2-3/8, then 100 at 2-1/4, then 100 at 2-1/8. At this point we would own 500 Tri-Continental warrants at prices ranging from 2-5/8 to 2-1/8. On the 10th week (10th line) we would sell our 2-1/8 warrants at 2-1/2 and two weeks after that our 2-1/4 warrants at 2-5/8. The week after that we would repurchase our 100 warrants at 2-1/4. The following week was a strong one for Tri-Continental warrants. The price moved up to 2-7/8 and on the way we sold our warrants costing us 2-1/4, 2-3/8 and 2-1/2 for 2-5/8, 2-3/4 and 2-7/8 respectively. We are left with only 100 shares which cost us 2-5/8. In that 14 week period we had enjoyed 7 trades of 3/8 points each, netting \$20.45 per trade, or a total of \$143 on an average investment of approximately \$1,000. Since the reader would not appreciate our filling these pages with a multitude of numbers, let the interested reader himself work this out, using the above formula. When the market declines for the warrant, buy every 1/8 point down (holding no more than 100, however, at one price). When the market moves up, sell each 100 as soon as a 3/8 point move takes place on the upside.

Working the above out from the chart we arrived at the following fascinating figure -- a total of 68 completed trades were enjoyed, each one at a clear profit of \$20.45, yielding a total profit of \$1,390. As you make each week's entry you must record the number of shares being held 'in position' (a good trader's term) for that week. In that manner we arrive at a total by adding up all the number of shares held each week and then dividing by the total number of weeks. Our figure showed a total of 66,400 shares. Divide by 135 weeks and we find the average number held was 490 Tri-Continental warrants. Next we must find the average price of stock held during the 135 weeks and our calculation shows it to be closest to 2-3/4.

Multiplying 2-3/4 (average price) by 490 (average number of shares held), we find that on an average investment of \$1,347 we had a clear profit of \$1,390. In other words, we had doubled our money in about 2-1/2 years.

Now, there are two qualifications we must introduce. (1) some trades may not come off where the chart hits a certain price but your open order may be behind others and may not be executed. An inspection of the chart shows that this qualification would not be important. (2) our chart is only a weekly chart, while a trading operation is very naturally carried on a daily basis. Were there opportunities to make more than 1 trade per week on a certain price level? Undoubtedly there were a considerable number of such opportunities, particularly in active weeks.

In other words, as a very minimum, the above operation was earning 40% on invested capital in a perfectly automatic way. As we mentioned before, the whole problem of such short-term trading has many fascinating by-paths. Instead of buying 100 each 1/8 down, suppose you increased the investment as the price declined, buying say 150 on the second step, 200 on the third, 250 on the fourth, and so forth. Or, above 3 you could widen purchases to every 1/4 down. Or you could buy every 1/4 point down, doubling the amount each time and selling out every 1/2 point up. And not only could such procedures be worked out for the Tri-Continental warrant, but the Atlas warrant also could prove an excellent medium.

All of these are deposited in the reader's lap for some extended consideration on rainy days. What particularly appeals to this writer is the fact that when ten 'experts' are predicting a rising market and ten other 'experts' are predicting a falling market, and a general pall of uncertainty beclouds the entire picture, short-term trading with the common stock warrant, in the above outlined procedure, continued to earn money at a rate of 40% or more -- and while it is decidedly difficult to say the market is 'going up' or 'going down', it is quite foreseeable in almost every case that 'the market will continue to fluctuate' as a fairly shrewd fellow named J.P. Morgan once said. The writer is quite convinced that the common stock warrant as a trading medium deserves really serious consideration.

* * * * *

(Note: In the investment service published by R.H.M. Associates, "The R.H.M. Warrant & Low-Price Stock SURVEY", the principles of short-term trading have been exhaustively worked out and practically applied not only to the common stock warrant, but to the entire field of low-price stocks as well. Further details of our investment service may already be in your hands, or you may write to the publishers, R.H.M. Associates, 220 Fifth Avenue, New York 1, N.Y.)

* * * * *

A Currently Significant Story of Warrant Opportunities

-- General Tire & Rubber Warrants

The story of the General Tire & Rubber Warrants, as told in the most specific sense in the actual recommendations in the pages of the R.H.M. Warrant & Low-Price Stock SURVEY, is significant from 3 standpoints: (1) the little comprehension in the financial community of the common stock warrant and its opportunities; (2) the remarkable manner in which mathematical analysis alone can pinpoint warrant opportunities; and (3) the manner in which correctly selected warrants can sometimes be better all-around investments than their respective common stocks because they offer far more opportunity on the upside and less danger of loss on the downside. Here is the story as it actually worked out in the pages of our SURVEY.

Origin of the General Tire & Rubber Warrants

In the course of its expansion and diversification program during 1955-1956, the General Tire & Rubber Co. wished to acquire majority ownership of the A.M. Byers Co., an important manufacturer of plastic pipe. Towards this end, in August 1956, the company made an 'exchange offer' to the stockholders of A.M. Byers Co.

For each share of A.M. Byers preferred stock, General Tire offered 1.1 share of preferred stock plus one warrant. Each warrant was the right to buy General Tire & Rubber common at \$70 per share to June 15, 1959, and at \$75 per share thereafter to June 15, 1961, when the warrants would expire.

For each 3-1/3 shares of A.M. Byers common stock, General Tire offered 1 share of General Tire preferred stock plus one warrant. Here, each warrant was the right to buy General Tire & Rubber common at \$60 per share to September 15, 1959, at \$65 per share thereafter to September 15, 1960, and at \$70 per share thereafter to September 15, 1961, when the warrants would expire.

A substantial number of common and preferred stockholders of A.M. Byers Co. accepted the above exchange offers and there were thereby created two classes of General Tire & Rubber Warrants as described above.

Our SURVEY Recommendation of General Tire & Rubber Warrants

In its issue of September 28, 1956, our investment service, the "R.H.M. Warrant & Low-Price Stock SURVEY", recommended to its subscribers the immediate purchase of the General Tire & Rubber \$70 warrant (as well as the \$60 warrant). General Tire common was then selling at the 50 mark on the New York Stock Exchange while in the over-the-counter market the \$70 warrants were selling at 4.50. In the complete report following up this recommendation, the following reasoning was outlined for the consideration of our subscribers. Assume that you were of the opinion that General Tire & Rubber was such a remarkable speculation in September 1956 that the common had the possibility of doubling in price to \$100 per share. If General Tire common did go to \$100, what then must the \$70 warrant be worth? With General Tire common at 100, the \$70 warrant (being the right to buy one share at \$70), must be worth a minimum of \$30. For the holder of the warrant could present his warrant to the company, receive one share of stock for \$70 and then immediately sell it in the market for \$100.

Well then, if a 100% appreciation in General Tire common from 50 to 100 must move the \$70 warrant from 4.50 to 30, an appreciation of 566%, the warrant appreciating 5-1/2 times as fast as the common stock, anyone considering a purchase of General Tire & Rubber common for appreciation would obviously be far better off buying the \$70 warrant.

General Tire Common Versus General Tire Warrants on the DOWNSIDE

If one grants that the warrant must mathematically advance much faster than the common on an upside move, perhaps this favorable aspect of the warrant is negated by a possibly far greater percentage loss on a downtide move? Again, simple mathematics will give us our answer, and it is most favorable to the warrant. Assume that General Tire common had declined by 50%, moving from its September 1956 price of 50 to a low of 25. The \$70 warrant, selling at 4.50, could then also decline by 50% or to 2.25, without showing any greater percentage loss than the common. Based on the past record of many warrants, we were of the opinion that the General Tire \$70 warrant, as a long-term call on a popular stock, would not be likely to decline below 2.25 were the common stock to sink to 25. But let us proceed to demonstrate that even if the warrants had the potential of sinking to 0, they would still be a better medium for appreciation than the common!

Taking our September 1956 prices of 50 for General Tire common and 4.5 for the \$70 warrant (the figures work out equally well for the \$60 warrant), let us consider two alternatives:

- (1) You buy 100 shares General Tire common at 50, costing \$5,000
or (2) You buy 600 General Tire \$70 warrants at 4.50, costing \$2,700

We shall first consider actuality, where General Tire common did go to 98-1/2 in the summer of 1957. When we include the value of a 4% stock dividend declared in December 1956, the \$5,000 investment in 100 shares of General Tire common had appreciated to \$10,244, a gain of \$5,244. But the General Tire \$70 warrant had in actuality in that same period appreciated from 4.5 to 39. The \$2,700 investment in 600 warrants had appreciated to \$23,400, showing a \$20,700 gain. The \$2,700 investment in the warrants had shown 4 times as much appreciation as the \$5,000 investment in the common.

Now consider the downtide: Should General Tire common have declined to 25, the \$5,000 investment in 100 shares at 50 would have become worth only \$2,500, showing a \$2,500 loss. But where the General Tire \$70 warrants are concerned, even if they went to 0, the \$2,700 investment in 600 warrants could show only a \$2,700 loss, and the loss would obviously be far less since the warrants would not go to 0, having a life to 1961.

What simple mathematics has shown us, therefore, is that an investment in the General Tire & Rubber \$70 warrants of about half the amount in the common did show 4 times as much profit on the upside and could not possibly have shown a greater loss on the downside. Both General Tire warrants (the \$60 warrants also went from 7 to 46 in 1957) deserved the attention of every investor when they sold at such attractive prices in September 1956.

Hedging The General Tire & Rubber Warrants

On October 12, 1956 our service followed up our original purchase recom-

mendations on the two classes of General Tire & Rubber Warrants by a four-page report detailing how positions could be set up in the General Tire warrants where the possibility of loss was greatly minimized and, indeed, reduced to 0 in certain circumstances! Using the \$60 warrant for our example in the report, the warrant selling at 7 with the common at 50, we first examined the case for the straight purchase of the \$60 warrant, as per our original recommendation, and then went on to consider the "hedge" possibilities. The entire description is so vital to an understanding of warrant opportunities that we ask readers to follow carefully the reasoning outlined in the portions below of our SURVEY report of October 12, 1956:

* * * * *

... Moving on to some actual figures, the market price for General Tire & Rubber common on the New York Stock Exchange as we write is about \$50 (we will take that price for our computations), and the \$60 warrant is trading in the over-the-counter market at 6-1/4 bid - offered at 7. Though such a market might indicate that we could buy the \$60 warrant cheaper than 7 we will take that price for the figures which follow.

To arrive at reasonable figures for the warrants on both an upward or downward move in General Tire & Rubber common, let us examine the possibilities should General Tire (a) advance 50% from 50 to 75, or (b) decline 50% from 50 to 25.

If General Tire & Rubber were to sell at 75, the \$60 warrant, being the right to buy at \$60, must sell at least at \$15. However, it would be most reasonable to assume that the warrant must sell at least at a 5 point premium, or at 20. Indeed, the wide spread between common and warrant at this point (75 and 20), and the mounting enthusiasm accompanying such a rise would more likely see the warrant at 25, but a \$20 price for the warrant will more surely keep us within the bounds of conservatism. To further understand the case for assuming a \$5 premium for the warrant with General Tire & Rubber at 75, we need only look at some figures. Suppose General Tire \$60 warrants were to sell at no premium, or at 15, with the common at 75? A further 25 point advance in the common to 100 would make the warrant (the right to buy at 60) worth a minimum of 40. Thus a 33% further advance in the common from 75 to 100 would result in a minimum 166% advance in the warrant from 15 to 40, in addition to making possible such excellent hedge opportunities as we shall shortly describe. Such opportunities would not be passed up by professional traders, with the result that the \$60 warrants would certainly sell at least at a \$5 premium with the common at \$75. On the upside, then, we have the probability that with General Tire common at 75, the \$60 warrant would sell at 20.

On the downside, with General Tire at 25, we are in much more conjectural ground. We have to determine the possible worth of a 5-year call at 60 when the stock is selling at 25. Drawing on past experience, we would estimate that with the common at 25 the warrant would probably sell somewhere between 2-1/2 and 3-1/2. If we take an average price of 3 for purposes of our mathematical calculations, each subscriber can still work out the figures for a further drop to, say, 2 or even 1-1/2, and that would still not greatly affect our basic thesis, as we shall soon see.

We will consider first an obvious alternative for an investor who thinks highly of the continued potential for General Tire but is concerned about the

state of the general market and the possibilities of a steep market decline, which could then easily break General Tire down to the \$25 mark. An investment in 100 shares of the common could, in this investor's more optimistic moments see the stock advance 50% from 50 to 75, or, in his more fearful moments decline 50% to 25. A \$5,000 investment in 100 shares of General Tire common could then move either up to \$7,500 or down to \$2,500.

An intelligent alternative would be to invest not \$5,000 but a mere \$1,400 in purchasing 200 General Tire warrants at 7. If the common were to advance to 75, we have seen that the warrants would be worth a minimum of 15, and almost certainly would sell at 20. With each warrant advancing 13 points, the 200 warrants would show a \$2,600 profit. We have also seen that a drop of the common from 50 to 25 would probably see the warrants sell at about 3. A decline of each warrant from 7 to 3 would mean an \$800 loss on the 200 warrants.

Here, then, is how our two alternatives would work out, with the common (a) advancing from 50 to 75 or (b) declining from 50 to 25:

A \$5,000 investment in 100 shares common at 50 would either advance to \$7,500 or decline to \$2,500, a profit of \$2,500 or a loss of \$2,500.

A \$1,400 investment in 200 warrants at 7 would either advance to \$4,000 or decline to \$600, a profit of \$2,600 or a loss of \$800.

Here we see that an investment in the warrants of less than 1/3rd the amount required in the common would show just as much profit on the upside and less than 1/3rd the loss on the downside, demonstrating the unquestioned attractiveness of the warrant as against the common.

Going further with our examples, assume that our investor wished to take the risk with the entire \$5,000. He would then purchase 700 warrants at 7 for \$4,900 instead of 100 shares common for \$5,000. We again have our two possibilities:

A \$5,000 investment in 100 shares common at 50 would either advance to \$7,500 or decline to \$2,500, a profit of \$2,500 or a loss of \$2,500.

A \$4,900 investment in 700 warrants at 7 would either advance to \$14,000 or decline to \$2,100, a profit of \$9,100 or a loss of \$2,800.

Here the same investment would show 3-1/2 times as much profit on the upside with the warrants, and only slightly greater loss on the downside.

"Hedging" Our Warrant Purchase

Though the General Tire warrants have thus far demonstrated their appeal, their full potential is hardly realized until one considers the "hedge" possibilities... Even if one is enabled to make a \$1,400 investment in the warrants produce as much profit on the upside as a \$5,000 investment in the common, there is still to be faced the potential loss of 50% or more of that \$1,400 investment in a serious market break. This factor will sharply limit the amount of funds one could commit to such a speculation.

Such a factor becomes greatly mitigated, or even disappears, when one considers the mathematics of the following "hedge".

Buy 700 General Tire warrants at 7	cost	\$ 4,900
Sell short 100 General Tire common at 50	cost	<u>5,000</u>
Total Investment		\$ 9,900

Taking our same previous alternatives with the common up to 75 or down to 25 and with the warrants consequently up to 20 or down to 3, we would find on the upside:

700 warrants are worth \$14,000 at 20, a net profit of \$9,100.
100 common sold short at 50 shows a net loss of \$2,500 with the common at 75.
Net Profit on the operation is \$9,100 minus \$2,500 or \$6,600.

Considering next the downside contingency:

700 warrants purchased at 7 for a total of \$4,900 are now worth only \$2,100 with the warrants at 3, showing a loss of \$2,800.
100 common sold short at 50 for a total of \$5,000 could now be 'covered' at 25, showing a profit of \$2,500.
Net loss on the downside part of the operation is thus \$300.

The above "hedge" position showed a potential profit of \$6,600 as against a potential loss of \$300 for an equal 50% move of the common in either direction. Possible loss could be brought down to the "0" mark by accepting a smaller potential profit through purchase of only 500 warrants at 7. Here the figures would work out as follows:

500 warrants are worth \$10,000 at 20, a net profit of \$6,500.
100 common sold short at 50 shows a net loss of \$2,500 with the common at 75.
Net Profit on the operation is \$6,500 minus \$2,500 or \$4,000.

On the downside:

500 warrants purchased at 7 for a total of \$3,500 are now worth only \$1,500, a loss of \$2,000.
100 common sold short at 50 for a total of \$5,000 could be 'covered' at 25, showing a profit of \$2,500.
Net Profit on the operation is \$500.

Instead of looking at the possible \$500 profit on the downside one could simply say that the 500 warrants could go down as low as \$2 with the common at 25 before showing any loss, a figure low enough for the warrant to ensure against any possibility of loss.

Consider carefully what the figures tell us in this last example. An investment of \$3,500 in 500 warrants at 7, and \$5,000 in short-selling 100 shares of common at 50, or a total investment of \$8,500, could show a \$4,000 or almost 50% profit on the upside, but no possible loss on the downside.

The same investor who was intelligently reluctant to buy more than a small amount of the General Tire warrants, no matter how bullish he was on the company, because of the possibility of a 50 to 75% drop in value in the event he was wrong about the company, could safely commit far more of his funds through use of the "hedge" which had eliminated almost any possibility of loss. Indeed, as we have previously explained, the legitimate

use of borrowed money in such riskless transactions could well raise potential profit to the 100% mark or higher with the possible loss on the downside still close to or at the 0 mark!

(This concludes our excerpts from the SURVEY report of October 12, 1956.)

* * * * *

The Conclusion Of The General Tire & Rubber Warrants Story

In the surging bull market of 1958-1959, General Tire reached an adjusted high of 264, reflecting a 3 x 1 stock split and stock dividends of 4% and 2%, for all of which the warrants had been fully adjusted.

The effects of this move by the common on the two warrants discussed here were profound. The \$60 warrants had been recommended for purchase initially at 7.25 and had reached 204. The \$70 warrants had moved in the same period of time from 4.50 to 194. The common had moved up 428%, while the \$60 warrants had advanced 2,714% and the \$70 warrants 4,211%. The warrants had advanced 6 and 9 times as fast as the common stock.

The above story of the General Tire & Rubber warrants, told at such length, demonstrates, we trust, (1) the manner in which so many common stock warrant opportunities are created by default, simply because so much of the financial community is lacking in understanding of those opportunities; (2) the manner in which we can use simple mathematical logic to unearth warrant opportunities; and (3) the manner in which some warrants, far from being the 'rash speculations' which many sources consider them to be, thereby justifying their own lack of knowledge, may actually be far better investments than their respective common stocks!

* * * * * * *

A 1960 Look At "The Speculative Merits of Common Stock Warrants"

We cannot help but be impressed by one single fact: In 1949 when we first wrote this study there were only about nine warrants of consequence. Yet, we felt that those nine were of sufficient interest and potential that some attempt should be made to get some knowledge about them to the investing public. If the reader will now look at the last few pages he will find a list of warrants which numbers 87 in the active category, and about 20 in what we call a 'reservoir' of warrants, many of which will shortly join the list of actively traded warrants. In 1956-1959 alone, several dozen new warrants came into active trading. And many of the warrants which have come along are long-term warrants of 5 and 10 year duration, representing calls on some of the most interesting and dynamic companies in the United States and Canada. We are, therefore, happier yet that we undertook this work some years ago, and we were pleased too to bring the subject matter completely up-to-date because we believe that opportunities in common stock warrants along the lines explained in these pages will be many indeed in the years ahead. The reader's success in dealing with common stock warrants will depend upon his ability to exercise patience above all, to wait for the proper opportunities to mature. On the other hand, some warrant opportunities of both a short-term and long-term nature may

arise quickly at any time, and the reader must always be conscious of what makes a good warrant situation in order to grasp the opportunities at the most favorable price.

We might emphasize here that since warrants move in relation to their common stocks they should be considered a valuable adjunct to success in the selection of securities rather than a substitute for that rigorous thought and careful analysis so necessary and so well rewarded in that most difficult field. In other words, if you misjudge the market, the industry and the company, it is unlikely that you will do any better in the warrant associated with the particular company in question. On the other hand, if your intellectual efforts are rewarded by correct selection, warrants can magnify your success by their fascinating characteristic of providing so much greater appreciation than their respective common stocks.

For example, suppose you had the good fortune to correctly analyze the coming boom in television in 1948? You might have selected R.C.A., Philco and Zenith, to mention a few, and your profits would have been substantial as R.C.A. moved from 7-7/8 to 23-1/4, Philco from 14 to 27, and Zenith from 19-3/4 to 70-1/4. Indeed, a \$4,162 investment in 100 shares of each at the above 1948 lows would have been worth \$12,050 at the 1950 highs, an appreciation of 189%. But suppose also that your careful analysis had unearthed a small but well-thought of West Coast television producer -- Hoffman Radio -- and you were aware that the greatest capital gains in a new industry come from the smaller companies as against the large, well-established companies. Certainly the following record of sales growth of Hoffman Radio from 1941-1950 should have caught the attention of a careful analyst somewhere around 1948.

<u>HOFFMAN RADIO</u>		
<u>Net Sales</u>	1941	\$ 29,764
	1943	1,839,043
	1945	4,243,893
	1948	5,112,889
	1949	11,987,650
	1950	29,580,510

Had you made this selection you would have shown far better results than with the larger, better-known companies mentioned above. Hoffman Radio common stock which sold at a low of around 1-1/4 in 1948 was showing earnings of about \$7 per share two years later on its multiplying sales and was selling near the \$30 mark. A \$250 investment in 200 shares of Hoffman common at the 1948 low was worth \$6,000 in 1950, an advance of 2,300%, twelve times as great as the percentage advance in the three larger television producers. This would have been the time for an investor, having made the choice of the correct industry, and the correct company, to also be aware that there was a common stock warrant in the capitalization of Hoffman Radio. The warrant was the right to buy stock at \$4 per share and at the time the stock was selling for 1-1/4 the best bid on the records for these warrants was a lowly 5¢. Within two years the warrants were \$25 bid. Based on these prices a \$250 investment in Hoffman Radio warrants was worth \$125,000 two years later, up 49,000% (!) and having moved 20 times as fast as Hoffman common, and several hundred times as fast as the three large television producers. In other words, the common stock warrant is a volatile, high-leverage tool which can greatly increase market profits ensuing from the correct stock market analysis.

Another Way Of Looking At Warrant Opportunities

If this book has accomplished no other purpose for you good readers, it should have at least armed you in the following manner: The great bull market of 1949-1959 still surges ahead as we write these words, with only temporary interruptions. But rest assured that there is no such thing as a permanent bull market and that the tide will one day turn the other way and create as many excesses on the downside in the form of sliding stock market values as have been created on the upside. During the pessimism of any future bear market, and particularly now that there are literally dozens of interesting warrants, each reader may then exercise his intelligence and whatever he has learned in these pages to place a small portion of his funds in what he believes to be the best-situated long-term warrants, and to hold that commitment, come what may, until bull market optimism has once again inevitably replaced bear market pessimism. We are certain that market profits in such an operation (requiring analytical competence and, most important, patience) must produce spectacular profits.

But it would be foolish to restrict such a flexible and potentially profit-producing market tool as the common stock warrant only to the 'bear market' role. The Hoffman Radio warrant opportunity saw a \$250 warrant investment in 1948 worth \$125,000 in 1950 without any bear market - bull market cycle. Alleghany Corp. warrants, Investment Co. of America warrants, Foremost Dairies warrants, Canadian Oil Companies warrants and many other warrants showed one opportunity after another for substantial market profits on intermediate market moves, profits which could be repeated at any time upon the correct gaging of an intermediate bottom in the current bull market. And many individual warrant situations will continue to yield to correct analysis and present little-to-lose-much-to-gain profit opportunities without regard to the "general market".

Looking back almost ten years we are satisfied that the logic expressed in "The Speculative Merits of Common Stock Warrants" in 1949 was well borne out in 1949-1959. We have no doubt that the same will be true in the years to come. Indeed, we have seen that the whole picture of the common stock warrant changed in 1952-58 with the issuance of new warrants on an unprecedented scale . . . All of which leads us to believe that the common stock warrant will have a fascinating and a profitable story to tell in the next few years for those investors who use common sense and logic instead of battling those excellent virtues. We have tried, in the pages of this study, to do the former. The story of the warrant, as we described it in these pages using a 1949-1958 cast of characters, now has a new and much larger company on the stage. The opportunities to watch for and the methods to apply are exactly the same, now as then, and we hope they will prove of some profit to our readers.

THE R.H.M. WARRANT & STOCK SURVEY

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CURRENT OPINION

Specially Recommended Warrants and Stocks

Tdd.	Name	Exercise Terms	Year Expr.	Val. Lev.	Val-Tech	Recom.	Prices Com. Wt.
S-0	Alabama Gas	35 to 12-64	1964				
T-T	Alberta Distillers	3.25 to 2-66; 4.25 to 2-69	1969				
T-T	Alberta Gas Trunk Line	27 to 5-66; 30 to 5-69	1969				
T-T	Algoma Central & Hudson	21 to 3-65; 25 to 3-68 SS	1968				
S-A	Alleghany Corp.	3.75	perp.				
O-O	Allegheny Pepsi-Cola	6 to 6-64; 7 to 6-66	1972				
O-O	Allright Auto Parks	10.75 to 11-68	1973				
A-O	Anelex Corp.	3 shs @ 5.83 per sh to 12-64	1964				
S-A	Armour & Co.	20 to 12-64	1964				
T-T	Assoc. Arcadia Nickel	1.25 to 3-66	1966				
S-A	Atlas Corp.	6.25 SS	perp.				
S-0	ARA Service	41.50 to 2-68; 47.50 to 2-73	1973				
O-O	Automobile Banking	11.66 to 2-65; 12.59 to 2-68	1971				
A-O	B.S.F. Co.	1.69 shs @ 14.79 per sh to 5-64	1964				
O-O	Baltimore Paint & Chem.	10.50 to 3-68	1968				
T-O	Bramalea Consolidated	10 to 7-73	1973				
O-O	British American Con.	15 to 9-65; 17.50 to 9-69 SS	1969				
T-T	Canadian Brit Alum A & B	12.50 to 9-64; 15 to 9-67	1967				
T-T	Canadian Delhi	11.25 to 7-64; 13.10 to 7-66	1968				
O-O	Canadian Gas & Energy B	6	perp.				
O-O	Cascade Natural Gas	15 to 5-65; 16.25 to 5-67	1967				
O-O	Cascade Natural Gas	1967 15 to 12-64; 16.50 to 12-67	1967				
T-T	Chemcell (1963)	8.50 to 3-67; 10.00 to 3-70	1970				
S-0	Coastal States Gas 2.50	2.50 to 6-67 SS	1967				
S-0	Coastal States Gas 10.67	10.67 to 6-67 SS	1967				
O-O	Colorite Plastics	5 to 3-65; 6 to 3-69	1969				
C-C	Commodore Business Mach.	4.50 to 11-74	1974				
O-O	Consolidated Bottling	5 to 12-64; 6 to 12-66	1972				
T-T	Consolidated Building	3.33 to 6-65; 3.67 to 6-66	1969				
O-O	Consolidated Leasing	5.00 to 4-66	1973				
A-O	Consolidated Oil & Gas	4.87 to 6-67	1967				
S-O	Cooper Tire & Rubber	2 shs @ tot of 25 to 7-64	1969				
T-T	Coronation Credit Ltd.	8.75 to 11-64; 10.25 to 11-67	1967				
O-O	Cove Vitamin	5 to 1-66	1966				
O-O	Crampton Mfg.	4.38 to 12-65	1965				
M-M	Dominion Lime	8.00 to 1-68; 10 to 1-72	1972				
A-O	Dorsey Corp.	9.50 to 4-69 SS	1969				
O-O	Dulany	5.50 to 6-65; 6 to 6-68	1977				
A-O	Duro-Test Corp.	8 to 9-65; 9.20 to 9-70	1977				
O-O	Executive House	7 to 12-66 SS	1966				
T-T	Exquisite Form Bra Can.	12 to 12-66; 13 to 12-67	1969				
A-O	Financial General Corp.	18.50 to 6-78	1978				
A-A	First Natl.Realty & Con.	1.10 shs @ tot of 6.00 to 12-66	1971				
O-O	Food Fair Properties	3.50 to 6-69	1969				
O-O	Gabriel (Maremont)	See Chart For Terms	1974				

Tdd.	Name	Exercise Terms	Year Expr.	Val-Tech	Recom.	Prices Com. Wt.
S-A	General Acceptance	20 to 11-69 SS	1969			
A-O	General Builders	1.07 shs @ tot of 3 to 4-69	1969			
S-O	Gen. Tire & Rubber 27.50	3.12 shs @ 8.81 per sh to 10-67	1967			
T-T	Great Lakes Power	11.60 to 5-65; 12.40 to 5-67	1967			
T-T	Great Northern Cap. "B"	11 to 9-64; 12 to 9-65 SS	1965			
T-T	Great Northern Cap. "C"	10.40 to 9-64; 11.30 to 9-65	1967			
O-O	Gyrodyne	20.50 to 9-65; 22 to 9-67	1967			
O-O	Harvest Brand	6.60 to 9-65	1965			
S-A	Hilton Hotels	46 to 10-67 SS	1971			
T-T	Husky Oil of Canada	14 to 12-64	1964			
T-T	Inland Natural Gas	13.50 to 11-64; 14.75 to 11-65	1966			
O-O	Investment Co. of Amer.	10.97 shs @ 10.48 per sh.	perp.			
A-O	Invest. Fund Corp. 1965	1.08 shs @ 16.58 per sh to 12-65	1965			
A-O	Invest. Fund Corp. 1970	19.23 to 12-65; 25 to 12-67	1970			
A-O	Jeff Lake Asbestos	5 to 12-66; 5/6 sh @ 6 to 12-72SS	1972			
A-A	Jeff Lake Petrochem B	7 to 6-65; 8 to 6-66	1971			
T-T	Jockey Club	5 to 10-65	1965			
T-T	Kelly, Douglas	4.75 to 11-65	1965			
S-O	Kerr-McGee Oil 1964	2.11 shs @ tot of 80 to 6-64	1964			
S-O	Kerr-McGee Oil 1967	2.04 shs @ tot of 80 to 6-67	1967			
O-O	Keyes Fibre	21 to 11-65; 25 to 11-70 Note #1	1970			
T-T	Lafarge Cement	10.27 to 7-64	1964			
T-T	Lake Ontario Port. Cem.	4.50 to 12-66	1966			
T-T	Laurentide Financial	16.50 to 10-68	1968			
S-O	Lehigh Valley Ind.	4.50 to 7-64	1964			
S-O	Ling-Temco-Vought \$30	30 to 8-66	1966			
S-O	Ling-Temco-Vought \$40	40 to 8-66	1966			
O-O	Lusk Corp.	5 to 11-64; 6 to 11-66	1966			
A-O	Lynch Corp.	13 to 3-65; 13.50 to 3-66	1967			
S-A	Mack Trucks 1956	1.4 shs @ tot of 47.50 to 9-65	1966			
S-O	Mack Trucks 1959	1.05 shs @ 59.05 per sh to 9-65	1969			
S-O	Mack Trucks 1961	46 to 4-71	1971			
S-A	Martin-Marietta	2.73 shs @ tot of 45 to 11-68	1968			
S-A	McCrory Corp.	20 to 3-76	1976			
O-O	Mid-America Pipeline Co	9 to 4-72	1972			
O-O	Midwestern Gas Transm.	15.00 to 12-73	1973			
O-O	National Bagasse Prod.	5 to 4-76	1976			
A-O	National Equip. Rental	7 to 1-65 SS	1965			
S-O	National General Corp.	4 wts. plus 12.15 to 3-65	1974			
T-T	Newconex Holdings	5 to 2-67	1967			
T-T	North Canadian Oils	7.50 to 6-65	1965			
T-T	Northern Telephone	4 to 5-65	1965			
A-O	Oklahoma Cement	14 to 10-71	1971			
S-A	Pacific Petroleum	1.1 shs at tot of 19 to 3-68	1968			
O-O	Pioneer Finance 1959	11 to 8-64	1964			
O-O	Pioneer Finance 1960	17.31 to 11-65	1965			
P-O	Pittsburgh Brewing	8.50 to 12-64; 10 to 12-65	1965			
A-O	Progress Manufacturing	0.61 sh @ tot of 11 to 7-64	1964			
T-T	Quebec Natural Gas	18 to 9-65	1965			
T-T	Quebec Natural Gas 1973	9.50 to 6-68; 12 to 6-73	1973			
A-A	Realty Equities	1.1025 shs @ 7.26 to 2-65	1972			
A-A	Rio Algom	0.135 sh at 22.23 persh to 12-66	1966			
O-O	Rocky Mountain Nat.Gas	5 to 7-66	1966			
A-O	Seaboard World Air 5 yr	3 to 11-65	1965			
A-O	Seaboard World Air 10 yr	3 to 7-65	1970			
O-T	Shell Investments	4 B wts + 80 to 9-72	1972			
S-O	Sheraton Corp. \$10	1.2 shs @ tot of 10 to 10-64 SS	1964			
S-O	Sheraton Corp. \$25	1.2 shs @ tot of 25 to 9-66 SS	1966			
A-O	Speedry Chemical	7.12 to 9-64	1964			
S-A	Sperry Rand Corp.	1.08 shs @ tot of 28 to 9-67	1967			
O-O	State Loan & Finance	25 to 11-68	1968			
S-O	Symington Wayne	15 to 5-68	1968			

Tdd.	Name	Exercise Terms	Year Expr.	Lev.	Val-Tech	Recom.	Prices Com. Wt.
S-0	Tandy Corp.	7.50 1-65 to 12-67; 9 to 12-69	1969				
A-A	Teleregister Corp.	17 to 5-65	1965				
O-O	Texas Gas Producing	14.659 to 4-65; 16.071 to 10-67	1967				
S-A	Textron Inc	25 to 5-64; 30 to 5-69	1984				
A-O	T C A	11.44 to 12-66	1966				
S-A	Trans World Airlines	20 to 6-65; 22 to 12-73 SS	1973				
S-A	Tri-Continental Corp.	1.27 shs @ 17.76 per sh.	perp.				
S-0	United Airlines 1966	1.19102shs @ 32.60 persh to 6-66	1966				
S-0	United Airlines 1968	1.1236shs @ 36.69 per sh to 12-68	1968				
O-O	United Industrial	2 wts plus 17 to 11-69	1969				
O-O	United States Finance	7.50 to 12-75	1975				
S-A	Universal American 1955	1 sh + 1'62 wt for 16.50 to 3-65	1965				
S-A	Universal American 1962	13.75 to 3-67	1967				
S-A	Uris Buildings	1.0609 shs @ 11.78 persh to 5-75	1975				
O-O	Walnut Grove Products	1.2 shs @ tot of 11 to 3-67	1970				
S-0	Del E Webb Corp.	6.25 to 12-75	1975				
T-T	Weston (George) Ltd.	9 to 10-66	1966				
T-T	Woodward Stores Ltd.	15.25 to 5-64	1964				

RECENTLY ISSUED WARRANTS

T-T	Clairtone Sound	6.50 to 9-70	1970
T-T	Lakeland Natural Gas	3.50 to 6-66; 4 to 6-68	1978
T-T	Slater Steel	14 to 1-67; 17 to 1-70	1970

Notes: Tdd. (Where Traded), S is for New York Stock Exchange, A is for American S.E., O is Over-The-Counter, T is Toronto S.E., C is Canadian S.E., M is Montreal S.E., given in common-warrant order; Exercise Terms: exercise privilege presently in effect, full terms given in individual warrant discussions elsewhere in your binder; SS indicates a senior security is usable at par in lieu of cash when exercising the warrant, as described in the individual warrant discussion in each case; Year Expr. is the year of final expiration of the exercise privilege; Lev. (Leverage) denotes the anticipated increase in the warrant price resulting from an increase in the price of the common -- thus, leverage of '2' indicates our estimate that a 50% advance in the common price will produce a 100% advance in the warrant price; / for leverage indicates there is too short a life remaining for the warrant to make any meaningful calculation; Val-Tech (Value-Technical Rating): 1 Highly Favorable, 2 Favorable, 3 Neutral, 4 Unfavorable, 5 Distinctly Unfavorable -- See essays on "Value-Technical Ratings" in your binder; Value-Technical Ratings are given in that order -- 2-3 means Value Rating of '2' and Technical Rating of '3'; An arrow next to either Value or Technical Rating indicates that the rating has been changed since the last issue, the direction of the arrow indicating whether the revision was up or down; Recom. (Recommendation): 'b' means "Buy On A Scale Down" and all designations in this column can be best understood and followed by carefully reading our "Buy On A Scale Down" essays in the front of your binder; Recommendations which have changed since the last issue are in all upper-case letters, thus B 1.5 instead of b 1.5 and HOLD instead of hold; Note #1: indicates complex warrant terms -- see individual warrant discussion.