STOCK WATERING

STOCK watering—a much abused term—may be defined as an increase of nominal capitalization of a corporation without a commensurate additional investment of funds. The baldest and simplest form—probably the one primarily responsible for the odium attached to the term by the general public—is the outright declaration of a stock or bond dividend. In this case no new capital whatever is put into the company. The new stock or bonds are a gift to shareholders.[1] The stock dividend, as will thus be seen, fully meets the contingency of an increased, if not indeed an excessive, revenue power. It makes more generous provision for distribution of earnings in future; and in so far it saddles a heavier burden upon the patrons of the road. But it does not affect a surplus already accumulated from heavy earnings in the past. Its effect is in no sense retroactive.

Flagrant examples of such stock dividends are scattered through our history. They occur nowadays with relative infrequency among railroads; but they are still common among express companies and other quasi-public concerns. The one-hundred-per-cent dividend declared by the Adams Express company in 1898 is a case in point. In the Hepburn investigation of 1879, stock dividends by railways were prominent abuses. Sheer fraud was often practised in issuing stock for speculative purposes. Between 1868 and 1872, for example, the share capital of the Erie was increased from $17,000,000 to $78,000,000, largely for purposes of stock-market manipulation. Convertible bonds were put forth in amounts "limited only by the capacity of the printing press." For this reason, in 1869, the governing board of the New York Stock Exchange actually refused longer to permit quotation of Erie securities.[2]

[1] The stock dividend is carefully to be distinguished from stock subscriptions with "rights" to shareholders—a mode of financing to be considered later.

[2] The Windom Committee Report (1874), Poor's Manual of Railroads (1884), New York Chamber of Commerce Report (1883) and the Report of the Cullom Committee (1886) abound in data of this period.

On March 16, 1876, an extraordinary payment was made by the St. Paul road. A fourteen-per-cent dividend on the preferred stock was declared: "Seven per cent on the net earnings of 1874 and seven per cent on the net earnings of 1875. This dividend is payable in consolidated sinking-fund bonds of the company."

A common device in the early days consisted in the payment of excessive sums to dummy construction companies, composed of directors of the railroad and their friends. The original Central Pacific Railroad, for instance, actually cost only $58,000,000; but it is a matter of record that $120,000,000 was paid to a construction company for the work. The syndicate which financed the road received $62,500,000 par value in securities as profits, a sum greater than it actually cost to build the property. The eighty-per-cent stock dividend of the New York Central in 1868; scrip dividends on the Reading during the seventies; the fifty-per-cent dividend of the Atchison in 1881; the one-hundred-per-cent stock dividends of the Louisville and Nashville in 1880, by a pen stroke adding $20,000,000 to "cost of road" upon the balance sheet; the notorious one-hundred-per-cent dividend of the Boston and Albany in 1882; and the forty-per-cent Great Northern distribution in 1898—all these, and many more, have had much to do with instilling into the public mind the belief that "stock watering" is an evil well nigh inseparable from the business of a common carrier.

A typical example of a stock dividend giving rise to much public feeling in a conservative community occurred upon the Connecticut River road in 1893. This property was leased for ninety-nine years to the Boston and Maine road on a guaranteed rental of ten-per-cent dividends. In addition, by evident prearrangement, on the day of executing the lease a dividend of fifty per cent was made to Connecticut River stockholders. This was paid by giving ten-year four-per-cent bonds to each shareholder, equal in amount to one-half the face value of his stock holdings. This obviously saddled the Boston and Maine with the heavy burden of a twelve-per-cent annual rental for the life of the lease; for of course it was bound to discharge this new funded debt at maturity. The effect upon the Connecticut River road was to change a bookkeeping surplus of $1,000,000 into a substantial deficit. As was officially said in the now famous governor's message on the subject: "An issue of bonds to pay a stockholder's dividend is contrary to good practice and to sound principles of corporate financiering. It is safe to say no more unconscionable transaction has occurred in the railroad history of the state." [1]

A variation of this operation would be the issue of bonds, ostensibly for the purchase of securities of other roads and apparently secured by their deposit, but followed by a sale of these securities and the distribution of the proceeds in dividends without the retirement of the overlying funded indebtedness. That something analogous to this can in effect be done is instanced by the use of the Oregon Short Line Railway Company by the Union Pacific under the administration of the late Mr. Harriman. The net result was certainly to increase the funded debt of the Union Pacific system, without any commensurate addition to its actual assets at that time. That much of this indebtedness was subsequently converted into capital stock does not alter the essential features of the transaction.

A statement of exceptional rates of dividend paid by carriers appears for the first time in the official Statistics of Railways for 1908. The following table is taken therefrom:

NAME OF ROAD	RATE ON DIVIDEND-PAYING STOCK	
	1907	1908
Lake Shore road	11 and 12	14
Burlington road	7	14
Duluth and Iron Range road	—	120
Duluth, Messabe and Northern road	—	110
Morgan L. and T. R. R. and S. S. Co.	10	25
Southern Pacific Co.	4	13
Oregon Short Line Co.	30	110
Oregon R. R. and Navigation Co.	4	79

For these companies, the aggregate dividends paid amounted in 1907 to twenty-one per cent of their combined capital

[1] A lease in 1910 of the Northern Central to the Pennsylvania Railroad with a stock dividend of forty per cent and a cash dividend of ten per cent would appear to be a close parallel. This issue is however not yet settled.

stocks. The percentage for 1908 equaled the extraordinary rate of thirty-six per cent. Many of these rates are of course exceptional, being probably in part stock dividends. The Oregon Short Line is the most notable instance, it being the holding company for the large investments of the Harriman lines in securities of other companies.

Be the financial contingency, not of excessive present earnings, but of an uncomfortably large surplus on hand, the stock dividend affords no relief. For the stock dividend involves no gift of cash to shareholders. What is needed, in this case, is the declaration of an extra cash dividend. This is not "stock-watering" in itself, but is apt to be a correlated event. There is no addition of new stock to be supported by future earnings. But "a plum," instead of being paid in cash, may be so given as to reduce the income of the parent company and thereby enable it less obviously to be embarrassed by riches in future. The distribution may sometimes take the form of a gift of securities in subsidiary companies. The Great Northern dividend to shareholders, in 1906, of Lake Superior ore-land certificates, worth $90 on the open market, was of this sort. It has been competently estimated that, including this gift, the entire rate of return to stockholders of the road was not less than 147 per cent within a single year. To be sure, these ore certificates were acquired through the far-sighted sagacity of a great administrator, but the effect in arousing public sentiment was very marked. Only eight years before, the same shareholders had received a fifty-per-cent dividend in stock of the Seattle and Montana, which was subsequently exchanged for Great Northern shares. And substantial "rights," incident to new calls for capital, have been liberally sprinkled over the entire history of the road. The Northern Pacific road in 1908 met a similar situation by an outright cash disbursement. A substantial extra dividend of 11.25 per cent was paid out of assets of subsidiary companies undisclosed upon the books of the parent concern. The positive embarrassment of riches of the Union Pacific Company, due to appreciation in the value of its stock holdings in other roads, has also long been a source of confident predictions of similar distributions. Whether, in view of the maze of interrelated securities, a legally workable plan can be devised remains to be seen.

Sometimes the double complication of an unwieldy surplus and immediately and prospectively over-heavy earnings can be overcome by a single operation. Both stock and cash dividends may be combined in some manner. A very recent instance occurred on the Delaware, Lackawanna and Western. Operating under a special charter of 1849, it was protected from harassment by subsequent state legislation as to ownership or operation of coal mines. But by this same charter it was specifically forbidden to declare stock dividends. Conservatively financed in the face of enormously increased revenues from its anthracite-coal business since 1898, it was for some years earning as high as fifty per cent on its capital stock. Since 1906 dividends were paid at the generous rate of twenty per cent—double the highest regular rate on any other railroad—but even this, combined with extensive appropriation of surplus earnings to betterments, left an unwieldy balance. The market value of the stock rose in consequence to about $650 per share. The accounted surplus rose to $18,790,000, or nearly two-thirds of the total of stock and bonds outstanding. The "commodities clause" of the Hepburn Act of 1906, in effect prohibiting all railroads engaged in interstate commerce from owning or operating coal mines, suggested a remedy for all its embarassments. On July 1, 1909, an agreement was entered into with a specially organized corporation, by which all its coal was to be sold for sixty-five per cent of the market price, the buyer to assume all transportation charges from the mine. Stockholders of the parent railroad were then offered the valuable right to subscribe to shares of the new coal company; and at the same time a cash dividend of fifty per cent was declared by the railroad, to enable them to take advantage of the offer without expense to themselves. And finally, on top of all, a clear stock dividend of fifteen per cent was also given. How this last detail was reconciled with the prohibition in its ancient charter is not clear. But the fifty-per-cent cash dividend and the new corporation coincidently capitalized with the proceeds thereof were simple enough to arrange. The net result, taking the coal company shares at their first quoted market prices, was a dividend equal to 187.5 per cent per share. This established a new record, even among the most prosperous of the anthracite-coal roads. Perhaps the most extraordinary feature was that all the cash requirements of the transactions were met out of the surplus profits for the year, over and above the regular twenty per cent dividend.

The preceding operation shows how easy it is to evade any simple prohibition by law of the declaration of stock dividends. Such a prohibition of the issue of paid-up stock for less than par is found in the Corporation Act of the state of New Jersey. But any company so disposed—the United Fruit Company, for example, twice in recent years—merely declares a cash dividend and coincidently offers its shareholders for subscription at par an equal amount of new stock. The letter of the law is fully complied with. A most flagrant instance of this sort among common carriers was the 300-per-cent dividend of the Wells-Fargo Express Company in 1910. This amount in cash was distributed, coupled with the right to subscribe two-thirds of it to new stock of the company. The capital stock was thus trebled; each stockholder received 300 per cent on the par value of his holdings in cash; and, in addition, could sell his right to subscribe to new shares for a substantial sum. The notorious "plums" and "melons" of the Pullman Company and even the Lackawanna bonus are entirely eclipsed by this transaction.

Consolidation of railroad properties offers abundant opportunity to increase capitalization surreptitiously. The English practice of "splitting" securities had its beginnings in merger operations. The constituent companies may be so gerrymandered that successful ones with surplus earnings may average their rate of return downward by combination with other properties less favorably situated. A weak corporation, whose stock is quoted say at $50, may be merged in a second corporation whose stock is worth $150 per share. The latter may then issue new stock of its own in exchange for the $50 stock, share for share. Such an operation as this may not only deceive the public, by establishing a fictitious capitalization par in excess of the worth of the investment, but it may also constitute a fraud upon the shareholders of the more prosperous company, by diluting the value of their holdings. In ordinary offerings of new shares at favored prices, as already described, the shareholder finds in the bonus or "right" which he receives compensation for the fall in the value of his shares. But in these cases of consolidation, the bonuses or rights may go to the favored holders of shares in the weaker company alone. Of course it is conceivable that enhanced value may flow to both concerns from the merger; but the indirect result may appear only gradually. The classical instance of such manipulation is the merger of the Kansas and Union Pacific roads in 1880.[1] Jay Gould first quietly picked up, at a nominal price per share, a large amount of stock of the Kansas Pacific, then just out of bankruptcy. The Union Pacific, at the time, was a prosperous company paying dividends regularly. Both roads ran due west across the plains beyond the Missouri river, the Union Pacific from Omaha and the Kansas Pacific from Kansas City. The latter, however, had at the time no important western terminus. Under threat of building his moribund road through to a point where it would be a very troublesome competitor, Gould bludgeoned the directors of the Union Pacific into an agreement to merge on equal terms. His holdings were taken over share for share by exchange for Union Pacific stock. The combined companies then continued to pay six per cent on the new total capitalization and the following year increased the rate to seven per cent. By this stroke Gould made very large profits, and the shareholders of the Union Pacific were deprived of a portion of the earnings which otherwise would have belonged to them. As for the public, it was called upon to provide sufficient earnings to pay seven per cent dividends upon Kansas Pacific shares, which, prior to the merger, had been worth almost nothing.

Recent inflations of capitalization in connection with railroad consolidation are headed by the case of the Rock Island Com-

[1] Pacific Railway Commission Report (1888); 50th Congress, 1st session, Exec. Doc. no. 51, pp. 55 *et seq.*

pany. In 1902 this purely financial corporation bought up the old Chicago, Rock Island and Pacific Railway, capitalized at $75,000,000, and substituted therefor its own stock to the amount of $117,000,000, together with $75,000,000 of collateral trust bonds, secured by the stock of the property acquired. The entire history of the New York traction companies is studded with similar occurrences. One instance may suffice. In 1906 the Interborough–Metropolitan Company purchased $105,540,000 in securities of merged lines and issued in place thereof $138,309,000 of its own stock and $70,000,000 in bonds. The subsequent bankruptcy of this company and the loss of large sums by confiding investors are matters of recent history. It must be clear that, in both these cases, a purely fictitious capitalization was created, not corresponding in any way to the real worth of the property. Whether similar exchanges of securities, share for share, with branch-line companies absorbed by a main line, amounts virtually to stock watering or not would seem to depend entirely upon circumstances. The manipulation of branch-line finances upon the old Union Pacific road was notorious. Regarding the modes of acquisition of subsidiary companies by the Great Northern road, charges have repeatedly been made in Minnesota that each merger resulted practically in additional fictitious capitalization. Whether this is true or not would seem to be dependent largely upon whether the companies absorbed were worth the price paid for them; or, in other words, whether efficiency and earning power was promoted in a degree suitably proportioned to the enhanced capitalization.

Improper manipulation of betterment and maintenance accounts may readily lead to the augmentation of capitalization without corresponding investment of new funds. Betterments or improvements by the best of our railroads have commonly been in part paid for out of surplus income. Therein lies the great benefit of American over English practice. Dividends have been withheld, sometimes for years, in order to build up a road. But suppose so wise and conservative a policy be not adopted, and that expenditures for merely pretended betterments or for mere maintenance, which ought always to be cared for from current revenue, be charged not to income but to capital account. In other words, suppose new securities be issued to pay for fictitious improvements, or to pay for them in excess of their real value; or that they be issued to pay bills which ought to have been paid out of the year's earnings, merely to keep the property whole; or, even worse, that current expenses, in the form of bills payable, wages and salaries due and the like, be met by issues of interest-bearing scrip. Is it not clear that in all these cases capitalization is expanded unduly in relation to the actual investment of funds? Of course these things may be done, not openly, but in such a manner as to disguise the procedure. Floating debt, for example, may be allowed to accumulate, in order to pay current expenses, while dividends which ought to have been cut off continue to be paid; and then this floating debt may be discharged all at once by the issue of stocks or bonds. Or, as was done by the Northern Pacific in 1888 under the Villard administration just on the eve of bankruptcy, accumulated charges of improvements to income, covering a period of years, may be shifted over to capital account, and an attempt made to sell securities in order to balance the books. The history of railroad reorganization in the United States contains all too many instances of such deceptive financiering. They are usually of the nature of a fraud upon stockholders; they thrive upon the pretended need of secrecy in matters of accounting; and, from the public point of view, they invariably place an undue burden of securities upon the shoulders of the community, to be supported out of current earnings. The primary lesson to be learned, both by the public and by railroad managements, is that not all new investment of surplus earnings can properly be made the basis of increased capitalization. A certain portion of such investment is merely calculated to guarantee or preserve the continuance of the present regular earnings. To capitalize the full investment, in other words, may become a financial offence.

Practically all of the possible abuses or frauds heretofore described under the head of stock watering are found combined in a single instance in recent years—the reorganization by the late E. H. Harriman and his associates of the Chicago and Alton road during the eight years following 1898. The case is an illuminating one, for it shows how an unscrupulous management may, at one and the same time, enormously enrich insiders, at the expense of the investing public, and prejudice the interests of shippers, both by crippling the road physically and by creating the need of high rates for service in order to support the fraudulent capitalization. The imperative need of public supervision of the finances of common carriers can not be better demonstrated than by a plain recital of the facts in the case, based on the sworn testimony elicited by the Interstate Commerce Commission in the course of its official investigation of the matter.[1]

For many years prior to 1898, the Alton road had been very conservatively financed, in the face of a profitable and constantly expanding business. According to the books at the close of that year, the assets amounted to $39,900,000. These assets were represented by some $22,230,000 of common and preferred capital stock and about $11,000,000 of indebtedness outstanding. The balance appeared upon the books of the company as surplus. The stocks had long been in receipt of eight-per-cent dividends and commanded prices ranging from $150 to $200 per share. At this time the late E. H. Harriman and three associates formed a syndicate and bought up practically all the shares, paying top-notch prices for them. In the short space of seven years they expanded the total capitalization of the road from $33,950,000 to $114,600,000, an increase of over $80,000,000. In improvements and additions to the property out of this augmented capitalization, their own accounts showed only about $18,000,000 expended. It thus appears that securities aggregating $62,600,000 were put forth during this time without one dollar of consideration. This sum is equal to about $66,000 per mile of line owned—a figure considerably in excess of the average net capitalization of the railroads of the country.

The first step taken by the syndicate, after it had acquired practically all the capital stock of the Alton road, was to issue $40,000,000 of three-per-cent bonds. This amount, it should

[1] 12 I. C. C. Reports, no. 943. Further details and analysis are to be found in *The Journal of Accountancy*, July, 1907, especially at pp. 223 *et seq.*

be noted in passing, was $6,000,000 more than the total capitalization at the time. It was stated that these bonds were issued in order to retire maturing obligations amounting to $8,500,000, to make improvements and additions and for other corporate purposes. These bonds were issued to stockholders, *i. e.* to the syndicate, at 65 per cent of par. The bulk of these were promptly resold to the public, including the New York Life Insurance Company, at prices ranging from 82 to 94. Had these bonds been sold directly to the public, the Alton road would have received about $8,000,000 more than it in fact received. As it was, this sum went as profits to the syndicate.

The next step in the reorganization was to declare a dividend of thirty per cent to the shareholders, *i. e.* to the syndicate. Nearly seven million dollars was thus paid by the railway company out of the proceeds of the bond issue—there being no other funds available. This cash dividend, made out of the proceeds of a bond issue, was covered up by a readjustment of the road's accounts. At the outset the existence of a large bookkeeping surplus was noted; and it was estimated that appropriations for betterment and improvement, paid out of income during many years past, together with other items of ancient history, had rendered the property worth much more than appeared upon the books. Consequently, against the increased liabilities created by the new bond issue was set off among the assets the item of $12,444,000 for "construction expenditures uncapitalized." Thus was conservative financing in the past made to enrich, not the railroad company, but the private individuals who owned its stock. And the payment of a dividend out of the proceeds of a mortgage remained undisclosed to the world at large. Other minor details of the transaction, such as the use of $8,600,000 of the proceeds of the bond issue to pay coupons then due on other obligations, and the turning of other debts of the company, which should have been paid, into an apparent asset to be capitalized, were all directed to the same end. The main result of the creation of $32,000,000 of bonded indebtedness was less than $6,000,000 in cash to be spent upon the property.

The third step taken by the members of the syndicate was to sell all their holdings of stock in the old Chicago and Alton Railroad to a new company, the Chicago and Alton Railway, of which they were the incorporators. For the preferred stock, which had cost less than seven million dollars, and which had received a special dividend of thirty per cent, the new company paid them $10,000,000 in cash. For their 183,224 shares of common stock of the old company, which had cost $32,000,000 and on which they had received a special dividend of about $5,500,000, they took in exchange 390,318 shares of the new railway company. Part of this was then resold by them to the Union Pacific railroad, which was absolutely controlled by Mr. Harriman; and about three-fourths of the common shares finally turned up in the treasury of the Rock Island Company. To meet its obligations to the syndicate, including the purchase of a piece of new road at an exorbitant price, the new railroad company was called upon to raise some $13,000,000 in cash. This was effected by mortgaging the shares of the old railroad company, just purchased, for $22,000,000. These new collateral trust bonds were taken by a member of the syndicate at 60, although they soon openly commanded a price of from 78 to 86. The exact amount of profit to insiders at this point was never disclosed. One detail of the new mortgage may be added. It was supposed to cover some thirty-four miles of road in process of construction; yet it subsequently developed that no funds were reserved from the proceeds for that purpose. New securities had to be issued in order to complete it.

All these operations were obscured in the published accounts of the company. The balance sheet of 1906 included the item "cost of road, *etc.*," $117,000,000. In the preceding year it had been only $66,700,000. On the liabilities side, this difference was partially evened up by an increase in "funded debt" from $27,000,000 to $72,350,000. To the uninitiated it would appear as if the proceeds of large new bond issues had been expended upon the road. Yet so completely was the treasury gutted, that the new Rock Island management, on assuming control, was compelled to issue car-trust notes in order to procure equipment indispensably needed to meet the demands of traffic.[1]

[1] For a time alternate management by the Rock Island and Union Pacific Companies was agreed upon, in view of their joint investment.

The incentive for this capital expansion appears in the profit of $23,600,000 made by the syndicate as a result of its financiering—profit a large part of which should have accrued to the railroad company. First there was the profit on the initial sale of bonds at an absurdly low price; then a 30-per-cent extra dividend from the proceeds of a bond issue; then a sale of preferred stock at a fancy price in cash to the new railroad company. This was followed by a sale of remaining stock to the Union Pacific and Rock Island Companies at exorbitant figures; by the sale of a branch line for more than it was worth; and finally by the sale of the final large bond issue to insiders at a ridiculously low price. All this was capped by the supreme insult of a payment of over $100,000 to the main conspirator as a salary for financing the enterprise.

The only excuse offered, or palliation suggested, for these predatory transactions was that, despite the enormous increase in the total capitalization of the Alton road, the character of its securities was so readjusted that it could still be counted upon to meet its fixed charges out of earnings. Although dividends on the stock had to be discontinued and the market price of its shares shriveled to almost nothing, so low were interest rates on the new bonds, and so thoroughly concealed were the main facts until the new issues were floated, that the Alton did actually, as was alleged, get some $22,000,000 of cash for improvements and additions at an additional charge on surplus earnings of $660,000 a year; in other words at a cost of only about three per cent. The new plan substituted long-time bonds and guaranteed stock at low rates of return for common stock which formerly paid large dividends. Interest requirements did not expand in proportion to indebtedness. But how about the burden of this indebtedness when it matured? Bonds which realized to the company less than two-thirds of their face value must then be redeemed at par. And, in the second place, the control of the property was now most effectually divorced from the real ownership. For the real value was fully covered by the bonds outstanding, while responsibility to the public for the management of the road was vested in the possessors of an almost worthless stock.

A very necessary and proper financial operation, that of raising new capital for extensions and improvements on a growing property, may be carried out by offering to shareholders a right to subscribe to this new capital on specially favorable terms. This is often denominated stock watering. It may or may not be, according to the nature of the special terms offered. If stock watering be defined as an inflation of capitalization without any commensurate investment of funds, this operation would appear to be excluded. And yet, in exceptional cases, it may in practice have much the same effect. There may, in short, be an inflation of capitalization without a corresponding increase of real investment. Just in so far as the subscription price is below such a fair market value of the new offerings as would enable them to be fully taken by others, the shareholders gain at the expense of the corporation. Its capitalization will be enlarged, in relation to the capital, more than it need be. But offerings of this sort to shareholders possess several collateral advantages over an appeal to the general public. Bankers' commissions on a public underwriting are saved, and whatever bonus is given goes to augment the loyalty of stockholders, who may thus the more confidently be relied upon to come forward again. Finally, offerings of new securities to shareholders on specially favorable terms may be made a means of increasing nominal capitalization and of thus making provision for more generous returns to stockholders than it would be best to advertise by an outright increase of the regular dividend. It is this last motive which sometimes lays the corporation open to the charge of stock watering. Whether this charge is deserved or not would appear to depend upon the amount of bonus conferred, which may readily range all the way from so considerable a sum as practically to constitute a stock dividend down to a "right" with no greater value than is sufficient to induce the shareholders to accept the proffered terms. It may be a voluntary offering, at such discount below the market price as to stamp the operation as a mere blind for increasing capital stock. It may be a forced offering, due to inability of the company to sell bonds publicly for the completion of improvements partially effected, or to meet some other imperative need.

The particular mode of financing chosen to meet needs for new capital will largely depend upon whether the present shareholders can be relied upon to take up the new securities. Obviously, if the new investment is bound to yield a larger return than the current rate of interest on bonds, the shareholders may reserve the surplus earnings to themselves in either one of two ways. The corporation may borrow at the going rate by issuing bonds, which of course do not participate in present or future surplus earnings but leave that increment to be divided among shareholders; or the company may issue new capital stock for subscription among its shareholders. But unless all this new capital stock be taken by shareholders, it is better to issue bonds; for otherwise the growing earnings will have to be shared equally between the original and the eleventh-hour investors. This alternative has led to the use of a device by which shareholders who are not in a position to subscribe to new capital, may transfer their "rights" to others and still share in the benefits of the increase. This is the method of the so-called "privileged subscription."

A single illustration may serve to make the procedure clear. Suppose a corporation whose stock commands a price of $200 per share and regularly pays eight-per-cent dividends, doubles its capitalization by the issue of one new share at par ($100) for each share then held. At first sight it would appear that each shareholder would receive, for $100, a new certificate which he could at once turn about and sell for $200, that being the original market price. But obviously the increase of the share capital by 100 per cent dilutes the value of each share. One might expect that the market price would be cut in half. This will not happen, however, if the company is clearly able to continue to pay its regular dividend. The value of the total capitalization rests upon its probable income. Nevertheless, after the issue of the new shares, these and the old ones alike will probably at first sell down towards $150. At that price the original shareholder will continue to possess his one share; and in addition he will have a "right" to obtain a new share for $100 which will obviously be worth approximately $50 to anyone else. He has split his investment by allowing the immediate value of his original share to be cut by one-quarter; and by accepting $50 for the "right" which he has sold. He would appear to be no better off than before. He would appear to have eaten a quarter of his cake. But the crumb of comfort lies in the fact that, if the company is demonstrably able to continue to pay the same regular dividend, his income is not effected; and hence the price of his original share may soon rise toward its former level. He will then have profited by an extra dividend of $50 per share, whether he himself subscribed to the new stock at par or sold that right to another person.

The foregoing example is an extreme, though by no means an impossible one. Instances could be given of rights ranging all the way up to $200 per share. In some companies, like the Illinois Central during the nineties, stockholders have received as much as four or five per cent annually from rights in addition to their regular dividends.[1] The most extraordinary case is that of the Great Northern Railway, whose stockholders' returns from subscription rights have greatly exceeded their income from the regular seven-per-cent dividends. The common mode, however, is to increase the share capital by successive steps of from ten to perhaps thirty-three and one-third per cent at a time. Thus in 1904 the Southern Pacific authorized a new issue of preferred stock at par to all common shareholders, in the proportion of one new share for each five shares owned. The market price of the stock was then about $118. If each old share had entitled its possessor to one new share at par, which would command a price of $118, the right would have been worth $18 per share. But the premium above par on one new share had to be divided among five old shares; and, moreover, this premium had to be reckoned at the price of the stock not before but after the increase in its amount. In other words, the value of the rights had to "come off" the price; just as in the preceding instance it cut the price from $200 to $150 per share. Taking out one value of the right for

[1] *Cf. Quarterly Journal of Economics*, vol. xix (February, 1905), pp. 231–269. Also *Annals American Academy of Political Science*, May, 1910.

the drop in market value, and dividing the balance into five parts, each equal to a right, we find that the right was worth one-sixth of the premium, or $3 per share; the market price after the increase becoming $115 per share. The old shareholder could purchase something worth $115 for $100, for each five shares held; or he could sell his rights for $3 a share to any one else, who by purchasing five at $3 each, could acquire the same privilege of subscription at par. Such is the nature of the computation of values in privileged subscriptions. Other and more technical details are of special rather than of general interest. Whether the stockholder subscribe and then sell his new shares; "sell short" at once and "cover" by the new shares when issued; merely sell a portion of his present holdings and replace the old with new shares; or sell his privilege outright—these are matters of financial detail.[1]

The main questions of wider concern are whether transactions of this nature constitute stock watering or not; and what attitude public authorities ought to adopt toward them. It is clear that the "privileged subscription" must offer the new shares at less than the market price, else all incentive to subscribe will be absent. Occasionally, as in the notable Pennsylvania subscription of 1903, the market quotation may drop below the offered price, so that outside underwriting support may be needed to prevent utter failure of the transaction. This, however, rarely occurs, and—except to the corporation in need of funds—the important point is not so much the relation between the market and the subscription price, as the relation between the subscription price and par value. It is the amount of new capital acquired in proportion to the new capitalization liability created, which affects the public in future. From this viewpoint it appears indisputable that all issues of capital for less than par value paid-in are in the nature of stock watering. Thus, when the Great Northern in 1898 issued new stock of a par value of $100 to its shareholders at $60, it nearly doubled its capitalization liability in relation to its addition of

[1] The relative advantages of each are analyzed in the *Quarterly Journal of Economics*, vol. xix, pp. 235 *et seq.*

funds. Such action also effectively distributes any existing surplus. Thus a company having a capital of $125,000,000, capitalized at only $100,000,000, has a surplus of $25,000,000. If 100,000 new shares are issued at $80 in cash, this brings up its capitalization to $110,000,000, and its actual capital to $133,000,000. Its surplus has now dropped to $23,000,000, the diminution being exactly equivalent to the discount at which the shares were put forth. If the shares of the Great Northern had been put forth at par instead of at $60, the capital requirements of the company for extension and betterment could obviously have been met by an issue of a very much smaller amount of new stock; and the public in future years would have been relieved of the necessity of providing income for the support of a capitalization never actually paid for in cash. From every point of view, accordingly, the issue of stock for less than par value is detrimental. The company whose shares have never attained the level of par, which by implication means that its income has never warranted substantial dividends, can surely derive no benefit itself from a still further enlargement of its capitalization; and the public can ill afford the chance of being some day called upon to pay rates for service which shall support the additional burden. To railroads or other corporations in this plight, only one conservative course is open. There must be rigid economy; and every penny of income above interest charges must be devoted to upbuilding the plant to such a point that additional borrowing on favorable terms will become possible. The only alternative would be to issue a small amount of preferred stock, which by reason of its preference could be successfully issued at or above par. The prohibition of issue below par has been the policy enforced by law in Massachusetts for many years. It has been adopted by a number of other states, notably New York and Wisconsin. And while, in rare and peculiar cases, it may have worked hardship and, in cases of consolidation of companies, may at times have been ineffective, it has in the main been productive of great good.[1]

[1] *Cf.* Papers and Discussions, Twenty-first Annual Meeting American Economic Association, 1909, pp. 386 and 417. Also *American Law Review*, vol. xxvi, p. 861.

Is the issue of bonds at a discount similar in its effects to the emission of new capital stock below par? Especially in the flotation of new companies it has long been a common practice, usually enforced by circumstances. Most of our pioneer roads after 1840 were built from the proceeds of bond sales; and so speculative did these enterprises appear, that not only substantial discounts below par for the bonds but also large bonuses of stock were needed to carry the construction forward. In order to pass upon this question, it is necessary to understand the accounting practice. Suppose a company organized with $100,000,000 of bonds sold at 80, the stock, which as yet has no value, being given as a premium. Upon the books there must appear first among the liabilities $100,000,000 of indebtedness. Had the bonds been sold for par and the proceeds all been expended upon the road, this would be balanced on the assets side by a similar amount for "cost of road." But actually the road cost only $80,000,000, that being the proceeds of the bond sale. The almost universal practice has been to even up the balance sheet by an item among the assets of $20,000,000 as "discount on bonds." Perhaps the most flagrant case of such misrepresentation occurred on the old Atchison road prior to reorganization. Its books showed among assets no less than $40,000,000 as discount on bonds and allied items. As the total "cost of road" item was only $95,000,000, discount on bonds was well on toward half the entire book value of the property. It was really interest paid in advance; or rather, a substitution of low interest payments for enlarged capital obligations falling due at the end of the term. It should have been charged to income account, not reckoned as an asset in the capital account. The liability which must be met on maturity of the bonds is in no wise diminished by this accounting practice. But what can be done? This sum cannot be taken outright from the first earnings and charged to income, nor even perhaps pro-rated over the life of the bonds. Conceivably the earnings are not yet sufficient to permit such deduction. Additional bonds might be issued to place this sum in the treasury, but the diffis culty is that they again swell the liabilities. Oftentimes the company may choose to cover up the item by otherwise juggling its statement as to cost of property. As indicative of the difficulty of regulating this matter, the divergence between the policies of state railroad commissions is significant. The Massachusetts and the New York City commissions consistently decline to permit the capitalization of bonds at a discount. The Federal Interstate Commerce Commission forbids it as a matter of accounting practice. The New York up-state commission has been more liberal. The intelligent Wisconsin commission wisely distinguishes between the issue of bonds below par, as a necessity incident to new enterprises, and their emission as a subsequent means of inflating capitalization.[1] Whenever as in the Erie bonds of 1903–05, convertible into stock after 1915 at $50 or $60 per share, bonds issued at a discount may at some time be changed into stock below par, the matter becomes most perplexing. Broadly speaking, the practice would seem to merit condemnation. It should be permitted only in exceptional cases; for it violates, in appearance at least, that equivalence of real assets and liabilities which is so much to be desired.

With privileged subscriptions to new stock at or above par, the case is quite different. No stock watering, using this phrase as above defined, would seem to be involved. Moreover, the effect of a new issue at par is to decrease the "water" in an already overcapitalized company; for it tends to equalize the investment and the nominal capitalization. Suppose a railroad to be equitably worth $90,000,000, with a share capital of $100,000,000. Each share should be worth $90. If 250,000 new shares be issued at par, the capital investment rises to $115,000,000, while the capitalization becomes $125,000,000. This would bring the value of each share to $92. Thus in an already overcapitalized concern the average investment rises with each new issue at par. If on the other hand the company were already undercapitalized, a similar issue of new stock would reduce the market value of each share. In this sense, the issue of stock at par is not stock watering at all. Yet it is a

[1] *Cf.* especially the Antigo Water Company case, Wisconsin Railroad Commission Reports, vol. iii, pp. 647 *et seq.*

very efficient means of distributing both present surplus and future earnings, the more so in proportion as the market price of the shares rises above par. Excessively valuable rights, over and above a figure necessary to ensure the needed new capital, serve to conceal the real earning power of a system and to confuse the public mind in matters of rate regulation.

In order to avoid an undue distribution of surplus earnings by means of "privileged subscriptions" it is possible to issue new shares of capital stock at a figure above par. The premium, of course, may still be so far below the prevailing market price as to yield a profit to the participating stockholders. The success of the issue to the corporation in need of funds is thus assured. And, from the public point of view, the increase of capitalization is actually less than the accession of funds for improvement of the service. A considerable premium in the market value of shares, such as to make this an important question, has appeared only since 1900 for the larger part of the United States. But in the densely populated portions, with old established and prosperous companies, it has long been a matter of public interest. The experience of Massachusetts has been highly instructive in this regard. Its railroad commission is the oldest in the country, dating from 1869. And while in matters of rate regulation it has only advisory powers, *viz.* to investigate, report and recommend, in the sphere of regulation of capitalization its powers were long unique. The aim of Massachusetts legislation has always been to limit the issue of securities to the *bona fide* investment of capital. The issue of stock merely as a bonus to promote the sale of bonds has never been tolerated. The lines of this legislation were for the most part laid down in the early days, when financing by subscription to share capital was the rule. Most of this stock, moreover, was sold in the beginning at a fair percentage of its face value. As a result, with the demonstrated success of the enterprise, stocks have steadily risen above par, instead of merely rising toward it, as has been the case in other parts of the country, where share capital had at the outset no real worth.

At a relatively early date, the problem of dividing the premium on new shares between the stockholders and the public pressed for solution. The matter came to a head with the flagrant case of the Connecticut River road in 1893, already discussed,[1] since which time an indefinite policy has given way to an attempt at positive control. Inasmuch as the recent laws creating public service commissions in Wisconsin and New York seem likely to be followed by similar action both in the Federal congress and in other state legislatures, the details of this Massachusetts experience are worth description in some detail.[2]

The cardinal principle of Massachusetts legislation has been to require that no securities of public-service companies shall be issued except for cash and at not less than par value. Its success in limiting capitalization is amply evinced by the low average per mile of line which prevails. Whether, however, this legislation has not at times been so stringent as to hamper development is an open question. The wisdom of the general plan is almost universally recognized; but the practical means of attaining the desired end, without unduly hampering enterprise, have varied from time to time, The first plan, prior to 1871, was to prohibit all issues of stock except at par. This was unfair both to the corporation and to the public. It often deprived the former of whatever premium the stock would command at public sale; and it sometimes permitted distribution of an accumulated surplus by means of excessively valuable subscription rights. The second plan, in effect from 1871 to 1878, was to require that all new shares should be sold at public auction. But this violated the traditional rights of stockholders to preference in all such transactions. Moreover, it opened the way to contests for control between rival interests, which violently disturbed market prices. At this point, in 1893, came the enlightening experience with the Connecticut River road. This led to the anti-stock-watering law of 1894, prohibiting the issue of share capital at other than the market value, this value to be ascertained by the railroad commission.

[1] *Cf. supra*, pp. 99, 100.

[2] Perhaps the most illuminating comments—those of Professor Bullock—will be found in the Publications of the American Economic Association, Twenty-first Annual Meeting, 1909, 3rd series, vol. x, pp. 384–429. Conditions at an earlier time are described in Ripley, Trusts, Pools and Corporations (1909), pp. 121-148.

The Massachusetts law of 1894 undoubtedly restrained the issue of watered stock. Under it, shares were issued in some cases at premiums as high as $90. The Boston and Maine road put forth new shares at different times at $190 and at $165 in cash. The plan worked well as long as investors were in optimistic mood. And it happened that throughout the following decade, to 1903, the trend of market prices was steadily and sometimes strikingly upward. In consequence, shareholders almost immediately realized profits from subscriptions even at these high prices. To be sure, a very difficult task was imposed upon the railroad commission—that of determining in advance what the price would be after the new issue had been made. It was largely a matter of guesswork, and instances occurred in which "rights" were transferred into losses. Moreover, as was urged by the companies affected, this process of emitting shares at various prices introduced great inequalities as between different shareholders, in respect of the rate of return upon their investment. To the stockholder who subscribed at $190 per share, dividends at the rate of eight per cent obviously yielded only about one-half the rate of return which accrued to the old subscribers at par. In the determination of the reasonableness of general rate schedules, it was held, this would greatly embarrass both the legislature and the courts. Other details of this legislation were found to work hardship in practice; such as the limitation of bonded debt to the par value of the share capital (which still left the door open to the creation of heavy current liabilities), and the prohibition of stock issues to cover promotion expenses or to provide working capital.

With the panic of 1903, the unduly drastic character of the law became plainly apparent. Funds for development could scarcely be raised at all. One important company was obliged to borrow on its short-time notes at eight per cent, because of inability to market its stock at the high premium fixed by the railroad commission. Nor could it issue bonds, because of the limitation of indebtedness to the outstanding share capital. Conceding fully the desirability of sharing between the public and the corporation the benefits of a premium upon the issue of new stock, a special commission recommended a more liberal policy. Limitation of the rate of return upon investment to what was practically a savings-bank rate had dried up the sources of capital for improvement. The new law of 1908 amended the system by permitting new shares to be offered for subscription at a price not less than par, to be determined by the stockholders subject to the approval of the railroad commission.[1] The control of the state is still supreme, but an opportunity is offered for such liberality on the part of corporations and their shareholders as shall insure the success of their issues. Premiums of $25 per share, carrying rights worth as high as $5, have already been allowed.

The objection to this more liberal policy is, of course, that in times of abundant prosperity stockholders may be tempted to fix prices of emission so low as practically to entail stock watering. But in such an event, public interest will plainly call for further intervention by the state. All parties now recognize, however, as a result of this varied experience, that the rights both of the public and of shareholders must be respected. Complete freedom of issue leads to inflation; too drastic restriction dries up the springs of capital, upon which the public must depend for future growth; the wise course lies intermediate between the two.

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[1] Described in *Quarterly Journal of Economics*, vol. xxii, pp. 640–645.

The liberalization of the general corporation law is discussed in *Quarterly Journal of Economics*, vol. xviii, pp. 269–280; reprinted in Ripley, Trusts, Pools and Corporations, pp. 382–392.

THE ELECTRIC LIGHTING SYSTEM OF PARIS [1]

THE history of electric lighting in the French capital may be said to date from 1878, when a company was formed to furnish an electrical display in connection with the universal exposition of that year. This company did not, however, accomplish anything of consequence so far as the provision of street and private lighting was concerned. A few years later the electrical exposition of 1881 served to revive public interest in the new illuminant, and a commission was thereupon appointed by the prefect of the Seine to consider the feasibility of introducing electricity into the public lighting system. But this commission failed to justify its appointment; it showed little interest in the matter and accomplished nothing. Then in 1887 the destruction of the Opéra Comique by fire gave new proof of the dangers of gas and fresh impetus to the study of electricity as a substitute for gas in public places. It was found by those who looked into the matter that Paris was behind her sister capitals in Europe and very far behind the larger cities of America in the public use of electric light.

It was accordingly not until 1888 that the city government of Paris took up the whole matter earnestly and, after considera-

[1] For the study of the electric lighting situation at Paris, the leading sources of information are the following: Ville de Paris, Conseil municipal, Rapports et documents. Rapport de M. A. Lamounoux; no. 119 de 1883. *Ibid.* Rapport de M. Lyon-Allemand; no. 7 de 1888. *Ibid.* Rapport de M. Sauton; no. 87 de 1892. *Ibid.* Rapport de M. Ch. Bos; no. 101 de 1897. *Ibid.* Rapport de M. Félix Roussel; no. 48 de 1906. *Ibid.* Rapport général sur le projet de budget pour 1908 de M. André Lefèvre; no. 116 de 1907. Ville de Paris, Rapport de M. P. Lauriol sur le secteur municipal d'électricité des Halles (Paris, 1902). *Ibid.* Rapport de M. P. Lauriol sur le secteur municipal d'électricité: Fonctionnement en 1905; Historique depuis sa création (Paris, 1906). *Ibid.* Mémoire du Préfet de la Seine au Conseil Municipal (Paris, 1906). L. Garnier et P. Dauvert, Les concessions de gaz et d'électricité devant la jurisdiction administrative (Paris, 1894). Ed. Labbé, Les concessions d'éclairage à Paris et à Berlin (Paris, 1900). Ch. Marquet, Les secteurs de distribution d'électricité à Paris (Paris, 1902). G. Louis-Jaray, Le secteur municipal d'électricité à Paris: Questions pratiques de législation ouvrière et d'économie sociale (Avril, 1903). Jean LeVallois, Le régime d'électricité à Paris (Paris, 1908).