The Panama Canal Payment
Maurice L. Muhleman
The Journal of Political Economy
Volume 12, Issue 4 (Sept. 1904, 473-494).

## THE PANAMA CANAL PAYMENT.

The payment by the United States government for the Panama Canal property was the largest single international payment in the nation's history and one of the largest payments ever made within so short a space of time. The financial operations attending this transaction are therefore of more than ordinary interest, and I have set forth in the following pages the manner in which they were executed without interfering at all with the country's business and without any appreciable disturbance in our own money markets, while actually serving materially to relieve those of the European centers.

It will be recalled that when the preliminary negotiations for the canal property and franchises were completed, the government of the United States entered into an agreement to pay the French Panama Canal corporation the sum of \$40,000,000 for all its right, title, and interest in the enterprise, and to the newly created republic of Panama the sum of \$10,000,000, for the requisite territorial concession under which our government was to have complete control of the canal zone. Of this latter sum the government of Panama, having immediate use for only a small part of the cash, concluded to leave \$9,000,000 temporarily invested in the United States; hence, although the acquisition of the canal property called for the disbursement of \$50,000,000, the sum to be paid abroad was only \$41,000,000, and of this only \$40,000,000 was payable in Paris.

It was determined by our government to make this large disbursement without resort to the sale of bonds authorized for purposes of the canal by act of Congress, the net available balance in the Treasury, which, as is seen in the following table, stood above \$226,000,000 on March 5, 1904, having been deemed sufficiently large to meet the requirements.

Since, however, nearly \$155,000,000 of the balance was on deposit in those national banks designated as depositories of public

		TABLE	E I.			
THE	TREASURY	BAUANCE	AND	ITS	LOCATION.	*
	(I	n Millions at	(Dolla	rs.)		

<b>Дате</b> (1904)	Gross Bal- ance	Cutrent Liabilities	Net Balance	Set Aside	Net Cash in the Treasury	In National Bank De- positories
March 5	3tt.4 312.7	85.2 86.4	226.2 226.3	13.8	57 · 5 56 · 7	154.9
March 19	309.3	84.1	225.2	13.5	56.7	155.0
March 26	311.8	87.9 87.2	224.6 224.6	13.8	55.6 57.2	155.2 153.2
April 9	308.4	88.1 86.7	226.9 221.7	15.2	56.7 52.5	155.0 154.9
April 23 April 30	303.4	84.2	219.5 219.1	12.7	51.5 49.9	155.3 155.7
May 14	303.8 262.0	ზ6.⊡   წ6.ჳ	217.8 175.7	13.9 14.1	48.8 45.8	155.1
May 21 May 28	258.4 247.3	94.0 83.9	164.4 163.4	13.0	36.3 43.2	115.1
June 4	252.2	88.2	164.0	13.0	44.2	106.8

<sup>\*</sup> The Treasury in its statements treats outstanding drafts, and similar obligations payable on demand, as "current liabilities," and these are hence deducted from the gross balance. The amounts "set aside" are balances held in banks for disbursing officers and the Philippine treasurer's funds, subject to their checks, and hence not available for general purposes.

moneys, throughout the country, and nearly \$14,000,000 was otherwise disposed of, leaving only about \$57,000,000 net cash in the Treasury, it became necessary to draw upon the depository banks to effect the payment.

Accordingly Secretary of the Treasury Shaw early in February, 1904, notified the banks in question that a portion of the public moneys held by each of them would be needed; and that he would require the depositories outside of New York city to transfer their quotas to designated depositories in that city so as to enable him to have the funds at his immediate disposition, at one point, upon short notice. At that date the secretary estimated that the banks would be called upon to provide \$30,000,000; later he concluded to call the full \$50,000,000.

After due consideration of the ways and means of making the payment in Paris, the government determined to accept a proposal of Messrs. J. P. Morgan & Company, of New York, a house which has branches in Paris and London, to manage the operations upon terms which would not only obviate expense to the

government, but might even yield it a small profit. The same house had been appointed fiscal agent for the republic of Panama, and the Paris branch represented the interests of the owners of the larger part of the canal corporation's shares.

On March 4 Secretary Shaw notified the interior depositories that the first instalment, equal to 20 per cent. of their public-money holdings, must be in the New York depositories on or before March 25.

As usual during this season of the year, the country banks had large balances with their reserve agents in the metropolis; indeed, their balances were very nearly the largest on record and were increasing steadily by remittances of the surplus cash of the interior banks; hence these transfers, although aggregating about \$19,500,000, were readily accomplished by means of drafts, without disturbance; the sole indication that the transaction was perceptible was a rise in the rates of exchange on New York at Chicago and other western points.

A delay, not entirely unexpected, occurred in the final adjustment in Paris of certain legal questions concerning the canal corporation, and the funds of the government were not drawn upon for more than six weeks after the transfers of the first instalment of public moneys to New York were completed (March 25 to May 10); the New York city depository banks therefore held the sum during that period, which enabled them largely to increase their loans; the amount of the loans of all the metropolitan banks exceeded one billion dollars for the first time in their history, and deposits also reached the highest figures on record (Table II); interest rates for money repayable on call fell as low as one-half of 1 per cent, per annum and for commercial paper to 3½ per cent. (Table III).

During February and March the foreign exchange bankers gave studious attention to the conditions of the exchange market, with the view to effecting the remittances for the canal payment in such a manner as to cause the least possible degree of uneasiness. It was soon made manifest that the transaction could not be consummated without the actual export of gold, and preparations were made accordingly early in April.

TABLE II.

THE ASSOCIATED BANKS OF NEW YORK CITY — WEEKLY STATEMENT OF AVERAG CONDITION.

WEEK ENDING			CAS	H RESER	VES	Surplus	U.S.	Net Cast
(¥g04)	Loans	Deposits	Specie	Other	Total	Re- serves	Deposits	from I terior
March 5	999.9	1040.6	219.2	70.9	290.1	29.9	39.1	4.1
March 12	997 4	1037.3	219.2	70.E	289.3	29.9	39.5	2,2
March 19	998.9	1037.0	217.3	69.3	286.6	27.3	40.5	2.4
March 26	1007.9	1048.7	217.7	71.9	289.6	27.5	45.9	1.5
April 2	[022.7	1069.4	223.4	71.7	295.1	27.8	56.1	2.[
April g	1038.5	1085.5	223.1	71.2	1294.3	22.9	56.1	2.3
April 16	1043.3	1097.1	228.8	72.8	301.6	27.3	56.2	4.1
April 23	1046.4	1109.4	236.2	75.3	311.5	34.2	56.2	6.3
April 30	1049.6	1114.4	235.2	76.5	311.7	33.1	56.2	4.6
May 7	1071.0	1131.7*	230.6	75.0	305.6	22.7	56.1	4.9
May 14	1078.9*	1129.6	218.1	77 - 1	295.2	12.8	32.9	6.4
May 21	1056.6	itoo.6	210.I	78.r	288.2	13.0	26.8	7 - 4
May 28	1040.5	1008.0	223.3	81.1	304.4	29.7	24.9	8.2
June 4	1036.5	8.8001	226.6	79.8	306.4	31.8	23.4	7.7

TABLE III.
INTEREST RATES, NEW YORK, CHICAGO, LONDON, AND PARIS.

	New	York	Снт	CAGO .	Lot	MOON	PARIS	
WEEK OF (1994)	Call Money	Commercial Paper	Call Money	Time Money	Bank Rate	Open Market	Hank Rate	Open Marke
March 5. March 12 March 12 March 19 March 26 April 2 April 16 April 23 April 30 May 7. May 14. May 21. May 22. June 4.	13/1-2	4¼-5 4½-5 4½-4¼ 4¼-4½ 4 -4½ 4 -4½ 3¾-4 3¾-4 3¼-4 3¾-4 3¾-4 3¾-4	5% 555 555 54% 44% 44%	6 6 6 5 1/2	4 4 4 4 4 3 3 3 3 3 3 3 3 3 3	3 % 3 3 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½	3533333333333333	2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½ 2 ½

<sup>\*</sup> Highest totals on record.

The New York city bank statement does not reflect the condition on the dates given, but the averages of the daily condition for the week.

The surplus reserve is the amount of cash held in excess of the  $\mathfrak{s}\mathfrak{s}$  per cent. fixed reserve upon deposits.

The U. S. deposits are also "averages;" for the purpose of comparison the official reports show that the banks held \$38,800,000 before the transfers from interior banks, and \$58,200,000 afterward; having received, therefore, \$19,400,000.

<sup>\*\*</sup> Financial Chronicle's compilation.

The exchange situation was as follows: That for several months previously, and then continuing, there had been a marked falling off in our exports, particularly of breadstuffs and cotton, is shown in Table IV, and the prices of these staples had risen materially. For the four months ending April 30, 1904, the exports of breadstuffs showed a decrease of nearly \$30,000,000, compared with the same period in 1903; and while the exports of cotton for the same period showed an increase of \$5,500,000 in value, due to the abnormally high prices, the quantity exported was 385,000 bales less than in the previous year.

TABLE IV.

FOREIGN TRADE CONDITIONS.

(In Millions of Dollars.)

Мантня	MERC	HANDISE AND	Gold		
MONTHS	Imparts	Exports	Balance*	Imports	Exports
December, 1903	79.9	181.3	101.4	17.2	1.5
January, 1904	85.2	146.8	61.6	8.2	0.6
February	90.9	122.6	31.7	5.0	0.7
March	93.4	124.0	30.6	8.9	3.1
April	85.7	113.7	28.0	10.3	19.5
May	82.4	94.9	12.5	10.5	43.1

<sup>\*</sup> Excess of exports.

On the other hand, our imports, which had shown a tendency to diminish in the latter part of 1903, were again increasing; so that the visible international movement was unfavorable, and with the invisible movement also against us (due largely to the absence of a market for our securities in foreign centers), very little, if anything, remained of the balance favorable to us which it was generally admitted existed in the latter part of 1903. In fact, it was believed that the return of American securities had by March placed us largely in debt to London on current balances.

Furthermore, in December, 1903, a movement of gold from Japan to our Pacific ports, almost all for transfer to London to pay for war material, had begun, continuing indeed until May, 1904, and aggregating more than \$34,000,000, which compelled the use of drafts against our credits. The gold was deposited in our government mint offices in San Francisco and Seattle, and

the value thereof paid out by the New York Sub-Treasury upon telegraphic orders. The Japanese banks used this method of making payments in London for the reason that the facility of telegraphic transfer across our continent shortened the time of transit fully ten days, compared with the ordinary mode of sending specie by steamers via Suez.

Hence there were no substantial credits abroad against which bills of exchange could be drawn; the creation of new credits by means of commercial bills against exported commodities was very limited; our securities were not in favor abroad; per contra, the demand for bills was active; rates were exhibiting a rising tendency; bankers were looking forward to the usual needs for travelers' letters of credit in the early summer.

Nor was it practicable to establish large credits by borrowing abroad, a method frequently made use of by means of "long" bills of exchange (payable in three or four months and accepted for discount in London or Paris). Discount rates in London stood at 4 per cent, at the Bank of England, the open market rate fluctuating actively about 3 per cent.; in Paris the rate of the Bank of France was 3 per cent, and the open market only a little lower; whereas in New York call money ruled steadily at 134 to 2 per cent. (Table III). Demands for certain large domestic loans were presently looked for in the British money center, and both there and in Paris bankers were already studying measures to accommodate Russia and Japan with funds wherewith to prosecute the war in the far East, which it was estimated would call for \$210,000,000. Paris banks, which expected to carry the greater part of this burden, were withdrawing their loans in England, which were unusually large, and actively bidding for gold in London, buying almost all that arrived there from South Africa and Australia; the Bank of England protected itself against drafts upon its own gold reserve only by maintaining, almost forcibly, a 4 per cent, rate. The anomaly was thus presented of gold flowing away from a money center where the official discount rate was I per cent. higher than at the center to which the gold was exported.

Obviously no substantial sum could under these circumstances be borrowed by us in Europe.

Moreover, conditions in this country were quite favorable to making the Panama payment in cash. The supply of money in circulation had increased in the twelve months ending March 31, 1904, by nearly \$165,000,000, and of this increase \$115,000,000 was in gold, as Table V indicates.

TABLE V.

THE VOLUME OF MONEY IN CIRCULATION. (THE SUPPLY OUTSIDE OF TREASURY

VAULTS.)

(In Millions of Dollars.)

	Тоты	L to CIRCUL	ATION		TIONAL NKS*	IN NEW YORK C(IV BANKS		
[ ]	April r	April 1 1904	June 1 1904	April 9 1903	March 28	April 4	April 2 1904	
Gold coin and (	984.9	1100.2	1095.5	314.9	381.7	158.1	223.4	
Bank notes Other forms		424.8 991.6	431.7 982.1	24.6 222.9	25.5 237.5	66.2	71.7	
Totals	2351.7	2516.6 164.9	2509.3	562.4	644.7 82.3	224.3	295.1 70.8	

<sup>\*</sup> The official statement of the national banks for June 9, 1904, shows cash holdings of \$689,000.000, of which \$391.000,000 was in gold, indicating a further accumulation of money in bank vaults.

More than the ordinary spring inactivity in trade was apparent. Clearing-house transactions, which quite accurately reflect the volume of general business, were steadily diminishing; not only as compared with the previous year, which showed a falling off of nearly 9 per cent., but actually month by month, as may be seen from Table VI.

The greater portion of the decrease was, it is true, in the transactions in New York city, largely due to diminished share sales: but almost all other points showed a general decline, the exceptions being Chicago and New Orleans, where the active speculation in grain and cotton, due to the rising prices, caused an increase, and San Francisco, which owing to its location is not so speedily affected by untoward conditions. The railway

TABLE VI.

THE COUNTRY'S CLEARINGS AND NEW YORK STOCK EXCHANGE TRANSACTIONS.

	CLEA	RING5		SALES OF	я Sтаска		SALES OF BONDS		
	(in M	iltians)		of Shares omitted)				Par Values (Millions)	
	1904	1903	1904	1903	1904	1903	1904	1903	
Sanuary February March April, May	9,436 7,714 8,183 8,300 8,216	11,089 8,469 9,582 9,581 9,118	12,263 8,282 11,441 8,205 5,290	16,001 10,922 15,095 12,293 12,468	666.9 500.0 654.0 439.4 288.0	1204.6 835.1 1132.5 900.0 901.5	80.5 36.0 46.1 58.8 37.6	66.8 64.2 51.9 48.7 52.1	
Totals	421058	47,839	45,986	66,779	2548.3	4973.7	259.0	283.7	

Average values 1903, per \$100 share, \$78.90; per \$1,000 bond, \$919. Average values 1904, per \$100 share, \$59.50; per \$1,000 bond, \$813.

Decline - - - \$19.40 \$106.

companies of the country reported a falling off in net earnings for the first quarter of 1904, compared with 1903, of more than \$16,000,000.

Money was accumulating in the financial institutions; the national banks, according to their official reports for March 28, 1904, alone held \$82,000,000 more in cash than they had a year before, and, measured by these official figures, it may be assumed that the cash holdings of other such institutions (which cannot be officially stated) had increased correspondingly; so that probably 75 per cent., or \$123,000,000, of the increased money supply was lodged in banking vaults, of which New York city institutions held over \$71,000,000. In short, there is conclusive evidence that the supply had run ahead of business needs. This was reflected in the low interest rates.

Nor had the plentiful supply of low-rate money been followed, as it usually is, by an increase in speculation; the deterring influence upon both speculators and investors of overloading the market with a mass of securities of uncertain value, in the large capital flotations effected during the past few years, is shown by the remarkable falling off in the volume of transactions in the New York Stock Exchange (Table VI). The reported sales of shares from January 1 to May 31, 1904, aggregated in number less than 46,000,000 against 66,779,000 for the same period in

1903; the average market value per share declined from \$78.90 in 1903 to \$59.50 in 1904. Sales of bonds diminished from 283,700, average value \$919 to 259,000, average value \$813. The speculative operations in grain and cotton alone showed larger than the year before.

We had thus a practical illustration of the effects of a plethoric supply of money, due to a large addition to the volume accompanied by a relative, even though not very pronounced, stagnation in business, viz., falling interest rates and rising exchange rates; but owing to special causes the security market did not exhibit the rising tendency following low money rates.

All the conditions taken together were reflected in the market rates for exchange on Paris, which ruled very near the gold export point throughout March, reaching that point in April, as the table of exchange rates shows. It is beyond question that we should have exported gold quite largely in April and May, even if the demand in connection with the Panama Canal payment had not arisen.

TABLE VII.

W8EK OF (1904)		Yokh on Lo \$4.86%= £t		New Yota fr. 5. 18:		Paris on London	CHICAGO	
	Demand	Long	Cables	Demand	Long	fr. 25.221=£1	YORK per\$1,00	
March 5	4.864-67	4.835-40	4.869-72	5.163/2	5.183/	25.161/2-16	20 ∉ disc	
17	65-68	38-4₹	69-71	16%	1834	17 -16	10 Ø "	
rg	65-70	40-44	69-72	16%	1814	15 -14	15¢ prem	
36	70-71	43-46	70-73	15%	181/8	14/4-14	100	
April 2	71-74	44-48	74-76	15%	18	14'4-13 4	1 201 00	
.2	72-74	47-49 48-51	74-78 76-78	15 %	17 %	14 -13%	25 89	
23	73-74	51-54	75-78	15% F5%	17 4	13'6-13'6	35 Ø "	
30	73-75 69-73	49-53	75-75	15-6	17 á 18	12 -10	20 6 "	
May 7	64-70	40-50	71-72	15%	18	LT.	25 6 "	
[4	69-70	49-51	71-72	15%	17 1/2	111/2-101/4	35 € "	
21	66-70	46-5t	69-72	1558	F7	101/3	40¢ "	
a8	69-72	47-54	69-71	15%	16%	13 - 11	400 "	
June 4	72~75	54~55	74-77	155%	1638	14%-12%	25 € "	

Exports of gold began on April 7, with three shipments of United States assay-office bars amounting to about \$3,000,000. It may be noted here that nearly all the exports of the period under consideration were made in such bars, only \$6,250,000 having been in the form of coin. These bars are prepared espe-

cially for export, and run about 400 oz. in weight, 995 one-thousandths and upward in fineness. Bars are preferred to coin for shipment abroad, because gold is taken by weight and fineness at its destination and the abrasion in the case of bars is practically a negligible quantity; coin obtained from banks or the Treasury is not always new (nor absolutely full weight); and even when new, it suffers a small diminution in value by abrasion in transit, which might be sufficient to deprive the shipper of his profit and at all events renders accurate calculations impracticable. Shippers obtain these bars by paying the assay office a charge of 4 cents per \$too of value, a premium of four one-hundredths of 1 per cent.

The exports of gold, the figures for which are given in Table VIII, made April 7 to 21, inclusive, and amounting to nearly \$6,000,000, were, in the absence of immediate demand for the Panama payment, presumably due to the obligation to transfer to London the Japanese remittances mentioned above; but the shipments could not have been made profitably to London direct at the rate at which sterling exchange (bills on London), was selling on any of the dates of the shipments.

TABLE VIII.

THE GOLD EXPORTS IN DETAIL.

(Amounts in Millions of Dollars.)

Exporters	APRIL, 1904				MAY, 1904				]пив	Тотац
EXPONENT.	7	12-14	<b>2</b> τ	26-30	3-7	12-14	17-21	26-30	2	10()(
Lazard Frères	T.5		1.5	3.0	2.0	2.5	5.1	2.3	9.6	18.5
Goldman, Sachs & Co	8.ه		,,.	2.3	2.0	1.5	1.3	{		7.9
Royal Bank of Canada	0.6	[		1.0		1.0		[		2.6
Heidelbach, Ickelheimer & Co		t.5		2.0	0.8	7,0	1.0	ا ا	,	(6.3
J. P. Morgan & Co				3.5	4.0	6.0	6.1			19.6
National City Bank		- 15				2.0	2.0	0.5		4.5
Ladenburg, Thalmann & Co	11.1			0.5	0.5		1.1	} j		1.0
Baring, Magoun & Co				0.5				ļ		0.5
	2.9	1.5	1.5	t2.8	9.3	[4.0	15.5	2.8	0.6	6a.q

The amount of bullion shipped was \$54,641,000
The amount of coin shipped was 6,250,000

\$60,801,000

The "gold export point" — or, as it is more generally termed, the "gold point" — is the rate at which bills of exchange may be

sold to exactly cover the cost of a shipment; a fraction of one thirty-second of I per cent. above that point, by way of profit, will usually cause gold to go out.

The rate referred to is that for bankers' bills or drafts payable at sight, which ordinarily depends in large measure upon the supply and demand (hence the rate) for commercial bills (drafts against commodities exported), which, being usually drawn payable in sixty or ninety days, require discounting and therefore range several points below the first-named class. Bankers purchase the commercial bills and have them discounted abroad, drawing their own bills payable on demand, against the proceeds.

The actual cost of transferring bullion to London or Paris is now less than formerly and is usually figured under one-fourth of 1 per cent. (say from .22 to .24 of 1 per cent.). The items are as follows:

```
Charges for assay-office bars - .04 per cent.

Insurance - - .04½ to .05

Freight and handling - - .13½ to .14

.22 to .24 per cent.
```

To this must be added interest on the money while in transit, whether paid by the shipper or the consignee. With money at 2 per cent, the interest charge adds .04 to .05 per cent, to the expense, making a total of from .26 to .29 per cent.; actual shipments to London show a cost of slightly under .27 and to Paris .275 per cent. As interest rates rise or fall the expense necessarily increases or diminishes.

The exact equivalent of £100,000, containing 25,682 ounces of gold,  $916\frac{2}{3}$  one-thousandths fine (the British standard), is \$486.666.66 $\frac{2}{3}$ ; adding the expense of transmission (.27 per cent. = \$1,314) gives the cost of laying down that amount of gold in London - \$487,980.66.

The exact equivalent of an ounce of British standard gold is 77 shillings, 10½ pence; there is, however, seldom an opportunity to sell gold bullion or bars in London at par; for although it can be converted into coin of the realm at the British mint free of charge, yielding the exact equivalent, there is always a delay,

which means loss of interest. Therefore the Bank of England buys gold bars at all times at the rate of 77 shillings 9 pence per standard ounce, charging 1½ pence the ounce for the accommodation; but in the open market a slightly better rate is frequently obtainable. Thus by April 7, owing to the active French demand, the price had risen to 77 shillings 10½ pence. The difference between the market price and the mint rate of ½ pence per ounce, calculated upon the 25,682 oz. standard gold in £100,000, means a charge of 6420.5 pence or \$75.10, bringing the total expense of the actual delivery of £100,000 to the London banker to \$488,055.76.

In order to recoup himself the New York exporter must hence sell his sight drafts on London at above \$4.88 per pound. Reference to the rates of exchange in Table VII will show that at no time during the entire period could such drafts be sold at a rate higher than \$4.875, and at most of the time rates were substantially lower. Transfers by cable, which are used to effect immediate payments, the charge for which is always a fraction higher than for sight drafts, were also under the rate necessary to repay the expense of a shipment.

Another factor entered into the operation however, viz., the rate of exchange on London at Paris. The theoretic par between these points is 25 francs 22.1 centimes to the pound. When the rate is below a certain figure it is possible to remit gold from New York to Paris for investment there in bills upon London, with which to establish a credit at the latter place, against which bills may be drawn in New York at rates lower than the prevailing sterling "gold point." In such a "triangular operation," a debt due by London to Paris is paid in specie by New York, which in return recoups itself by drawing upon London; or a debt due by New York to London may be paid by a remittance of gold to Paris.

The calculations are substantially as follows: £100,000 or \$486.666.66 contain 23,542.31 oz. of fine (pure) gold; the Paris mint pays 3,444 4-9 francs, less a coinage charge of 7 4-9 francs=3,437 francs, for the kilogram of fine gold, or 3.437 francs per gram; hence the net yield of an ounce of fine gold is

106 francs 90½ centimes. (The Bank of France ordinarily charges a small premium for cash on bullion purchased, but during the special demand prevailing, gold was paid for at the price named.) The 23,542.31 fine ounces would thus bring 2,516,790.65 francs. To purchase with this sum £100,000 in drafts upon London would give a rate of say 25 francs 16¾ centimes to the pound.

But on April 7 the Paris rate on London was 25 francs, 14 centimes; hence, with the above-mentioned proceeds of the sale of the gold in Paris, there could have been purchased drafts on London for £100,111. The cost of a shipment to Paris would be higher than that to London by, say, .005 per cent., which would mean on a shipment of the equivalent of £100,000 an expense of \$24.33 more than that to London as stated above, or \$488,004.99. Dividing this cost by the number of pounds sterling thus obtained (100,111) gives the rate for £1, viz., \$4.8746, at which rate cable transfers could have been sold in New York on April 7.

By means of the existing credit relations shipments can in most instances be made available for cable transfers, thus enabling bankers to take advantage of the rates at the moment of the transaction; in this instance, however, it was well known that, owing to the pressing demand for gold in France, the tendency of the Paris-London rate was downward, so that exporters of gold at New York were assured of a profit from the operation. When the rate declined to 25 francs, 11 centimes and lower, as it did at the end of April, continuing during May, it is obvious that exports under the "triangular operation" were profitable with sterling exchange rates as low as 4.87 and 4.865% to the pound; hence very considerable exports were made independent of the Panama Canal payment.

The calculations upon which direct New York-Paris transactions are based are as follows: The gold in one dollar is exactly the value of 5.1826 francs; deducting the French mint charge gives the actual parity 5.1714 francs; deducting the expense of transfer, .275 per cent., gives 5.1573 francs as the net equivalent per dollar.

Taking now the proceeds of the sale of the above-mentioned

theoretic shipment of gold, 2,516,790.65 francs and the expense thereof, \$488,004.99, we obtain the rate of 5.1573 francs to the dollar as stated; but the rate for Paris exchange in New York on April 7 (5.15%) gave 5.15625 francs to the dollar, leaving a small margin of profit, cable transfers of course yielding a slightly larger gain.

An actual transaction early in April resulted thus: \$1,000,000 shipped to Paris produced at the rate of 5.1573 francs to the dollar, against which cable transfers were sold at 5.1540, leaving a profit of .0033 of one franc per dollar, equal to about \$637, or 1-16 of 1 per cent., for the shipment.

The Paris-London rate and the New York-Paris rate expressed concretely the conditions which facilitated the transfer of the Panama payment. Money was cheapest in our center; Paris required actual gold and stood ready to pay more for it than London or New York; hence the gold went from New York to Paris, but the indebtedness of London to Paris was utilized by New York to save expense.

To pay \$40,000,000 in Paris free of all charge to the payees meant the delivery of 207,304,000 francs net; but \$40,000,000 at the rate at which shipments brought after paying all charges (5.1573 francs to the dollar), would produce only 206,292,000 francs, or 1,012,000 francs less than the required sum, equal to, say, \$196,200. By purchasing bills upon London, however, at 25 francs 10½ centimes to the pound, the proceeds of the shipments would bring £8,217,167.89, which, converted at \$4.868 to the pound, would give \$40,001,173.29. Demand sterling bills, and particularly sterling cable transfers, sold above that rate in New York during the period of the exports. The formula is substantially as follows:

£1,000 drafts cost in Paris 25,105 francs. 25,105 francs, at 5.1573, cost \$4,868. £1,000 drafts in New York brought \$4,868.

While the Paris-London rate was not continuously at the figures used in this calculation, the sterling cable rates at New York were constantly above 4.868.

Taking the mean of the average weekly rates for Paris-

London drafts for the period of the active exports connected with the Panama payment (from the week of April 30 to that of May 28 inclusive), we obtain the rate of 25 francs 11.1 centimes; the rate at New York upon Paris remained stationary; the mean of the average rates for demand sterling produces 4.8695 and that for cables 4.8713. Dividing the mean Paris-London rate by the stationary New York-Paris rate gives 4.8690. If we assume that the sales of sterling were about equally divided between demand and cables, the average rate obtainable would have been 4.8704, which would indicate an apparent profit of .14 of a cent per pound, or \$11,503.80 on the £8,217,000.

But the shipments were so timed, and the bills so bought and sold, that the supposition is warranted that a rate slightly lower than the average above mentioned was paid for London bills at Paris, and that sterling sold at New York for slightly better than an average of 4.8704. An average Paris-London rate of 25 francs 10.8 centimes would mean 4.8685 for the cost per pound; if the sterling were sold at an average of 4.8715, the profit would have been .3 of one cent on the pound, equal to about \$24,651, or very nearly one-sixteenth of 1 per cent., upon the entire transaction; a profit which cannot be regarded as adequate compensation for the labor and risk involved, and which would not in itself have proved a sufficient inducement to undertake the work.

Proceeding now with the history of the Panama payment: On April 23 the questions at issue in Paris were finally determined, and on April 26 the corporation's rights were formally transferred to representatives of the United States; the payment therefor was to be completed within sixty days; Morgan & Company arranged in Paris to make this payment; and it was further agreed that payment by the United States to that firm would constitute settlement.

On April 30 Secretary Shaw called upon the depository banks for another instalment of public moneys, amounting to \$12,000,000, to be transferred to the New York Sub-Treasury by May 10, and announced that the full \$40,000,000 would be paid to Morgan & Company by that date.

On May 2 the Treasury paid that firm \$1,000,000 by draft

on the New York Sub-Treasury, for account of the republic of Panama, as the first instalment of the sum payable for the "canal strip;" which was followed on May 4 by the transfer of the control of that territory to officers of our government at Panama. Only \$200,000 of the amount was actually shipped to Panama, the balance remaining here subject to drafts.

In anticipation of the Treasury payment of \$40,000,000, exports of gold were arranged for by Morgan & Company and other foreign exchange houses, on April 26, 28, and 30, aggregating \$12,800,000, with exchange on Paris at 5.15%, on London 4.869 to 4.873, cables 4.871 to 4.875; the Paris rate on London had fallen from 25 francs 12 centimes to 25 francs to centimes. The New York banks, owing to large receipts of cash from the interior and payments by the Sub-Treasury for Japanese gold transfers, showed no loss of cash; call money rates were slightly lower than the week before, ranging between 1 and 1¾ per cent.

During the following week (ending May 7) the exports of gold amounted to \$9,300,000; exchange on Paris unchanged; on London, firm at 4.869 to 4.870; cables 4.871 to 4.872; and the Paris rate on London at 25 francs 11 centimes. The New York banks showed a loss of \$6,100,000 in cash, but call money, falling at first (momentarily as low as one-half of 1 per cent., an almost unprecedented rate), rose only to 1½ per cent. later in the week, when Secretary Shaw notified the banks that he would require the public moneys under the first call on Monday, May 9.

Thus up to May 7, and prior to the payment by the government, the New York city banks had furnished exporters of gold the means to obtain bullion to the amount of \$28,000,000; of this sum apparently only about one-half was destined to cover the Pauama payment, but the funds were advanced by the banks practically out of the public moneys held by them; the payment was actually being made before the formal issue of drafts and bookkeeping entries, all that was necessary to transfer the actual title to the moneys.

During this week the city of New York placed an issue of numicipal bonds amounting to \$37,000,000; but since the moneys

of the city are kept in the banks, this involved merely a shifting of accounts between banks; and a part of this large sum was handled by the trust companies. The bank statement reflected the operations with approximate accuracy; loans having increased and the cash reserves diminished. The weekly statement of these institutions does not represent the actual conditions at the end of the week, but the average of the daily conditions for the week ending on Friday; hence the movement of money is not often reflected with accuracy in any single weekly statement; yet the general results are shown with substantial correctness when the statements for several weeks are taken together.

It was during this week, also, that the New York bankers were somewhat surprised to learn that representatives of American financial interests had agreed to underwrite, upon satisfactory terms, one-half of the \$50,000,000 Japanese loan then being brought out in London; a circumstance which under other conditions might have caused no little disturbance in both the money and exchange markets in New York; but the additional future obligation to furnish funds, thus assumed by the American money center, caused only a momentary flutter; the actual results to interest rates being nothing more than might have been looked for from the other causes then operating and already referred to.

On May 7 (Saturday) Secretary Shaw signed the Treasury warrant for the \$40,000,000 drawn in favor of J. P. Morgan & Company upon the New York Sub-Treasury; and personally took this, the largest draft issued in the government's history, to New York, where, on Monday, May 9, he delivered it to the payees at the Sub-Treasury, after they had qualified as disbursing agents of the government, by giving bond for the faithful performance of the trust; \$25,000,000 in United States securities were deposited by the firm with the assistant treasurer of the United States, to protect the government pending the transaction.

On the same day, May 9, the New York city banks turned into the Sub-Treasury their "cashiers' checks" for something over \$27,000,000, payable through the clearing-house, of which the Sub-Treasury is a member; the sum represented the public moneys embraced in the first call,<sup>1</sup> including the New York banks' quotas as well as the amounts they had received from the interior banks. This payment released an equal amount of bonds, held under the law to secure public deposits in banks, rendering them available for use by Morgan & Company.

The warrant for \$40,000,000 was paid to Morgan & Company in Sub-Treasury checks, also payable through the clearing-house; \$25,000,000 of these were at once deposited in banks by Morgan & Company and cleared upon the following day, meeting the checks for \$27,000,000 presented by the Sub-Treasury, involving, so far as this transaction was concerned, a cash movement of only \$2,000,000, which represented the cash loss of the banks thereby. The exports of gold on account of the Panama payment to date were thus reimbursed and provision made for the continuation of shipments.

On May to the second instalment of \$12,000,000 of public money in the depositories was paid over, the greater part to the Sub-Treasury at New York through the banks there. This was largely offset, so far as cash loss to the banks was involved, by the use of the balance of the Sub-Treasury payment to Morgan & Company. The following day a further call for \$10,000,000 of deposits was made, payable May 25, to cover the final payment to the republic of Panama.

During this week (ending May 14) the exports of gold amounted to \$14,000,000; exchange on Paris being still quoted at 5.155%, on London also unchanged, while the Paris-London rate fell from 25 francs 11½ centimes to 25 francs 10½ centimes.

The shipments included the highest cargo on record for one vessel, viz., \$9,00,000 going on "La Loraine" for Havre May 12.

An examination of the statement of Treasury balances (Table I) shows the \$40,000,000 disbursement, both in the gross and the net balances; the net cash in the Treasury was reduced by only \$3.000,000; all the depository banks held \$39,300,000 less than at the end of the previous week. Owing to the manner in which

<sup>&</sup>lt;sup>1</sup> The total amount of the first call was \$28,000,000; but a small portion was transferred otherwise.

the transaction was carried out, as already stated, the New York city banks, by the average system, disclosed a loss of only \$10,400,000 cash for the week, with a like diminution in surplus reserves, warranting the rise in the call money rate to 2½ per cent., which took place near the end of this week.

The week ending May 21 showed the largest exportation of gold for the period, aggregating \$15,500,000; exchange on Paris still at 5.15%, while rates on London were somewhat lower, fluctuating between 4.870 to 4.8665, with cables at 4.872 to 4.869; the Paris rate on London remaining steadily at 25 francs 10½ centimes; the sterling exchange parity was 4.868.

Secretary Shaw on May 19 paid Morgan & Company, for account of the republic of Panama, a draft for \$9,000,000, being the balance due for the canal strip, thus completing the Treasury disbursement of the \$50,000,000. This reached the banks so late in the week that it was not fully reflected in their statement; but owing to the receipt of \$7,400,000 from interior banks the loss of cash reported was only \$7,000,000, despite the large amount of specie provided for export. The call money rate rose to  $2\frac{1}{2}$  per cent., but fell later in the week, when it became apparent that gold exports were nearly completed, touching 1 per cent. at the close.

During the following week (May 23–28) the exports of gold were but \$3,200,000; exchange rates apparently still made the movement profitable, but it is probable that a portion of the exports were merely to cover bills previously drawn; the rate on Paris was unchanged, but sterling exchange rose, touching 4.872, in harmony with the Paris-London rate which advanced to 25 francs 13 centimes by the close of the week.

On May 28 Messrs. Morgan & Company announced that they had completed the Panama payment, having required only about thirty days for the actual operations. They had exported \$19,600,000 gold, providing the remainder of the amount required to cover their undertaking by purchase of bills, substantially at the market rate, from other exporters, especially Lazard Frères and the National City Bank.

The full effect of the final payment by the Treasury of \$9,000,000, the almost unprecedented total of \$8,200,000 cash received

from the interior during this week (of May 28), and the lessening of gold exports, caused the New York city banks to show a gain of over \$16,000,000 in cash and in surplus reserves; rates for money on call fluctuated between 134 and 1 per cent.

During the five weeks of heavy exports the banks had furnished \$54,400,000 for exports; they had received \$31,500,000 from the interior, and their net gain from the Treasury was sufficient to enable them to show a loss of only \$7,100,000 cash. They had provided \$15,000,000 of the public deposits used, so that the interior banks supplied the remaining \$35,000,000.

The demand for gold was satisfied; in the week ending June 4 the shipment of \$600,000 closed the export period, and this was reported to have been a special transaction, to cover exchange already sold. The Paris-London rate advanced to 25 francs 14½ centimes, sterling exchange following this lead; the rate on Paris was not changed.

It may be mentioned that the United States assay office at New York had exhausted its supply of bars, which would have made it necessary to ship coin, had the demand continued active.

By June 4, covering a period of three months from March 5, the New York banks held larger deposits, greater cash and surplus reserves, and had a greater amount of loans, than at the beginning of the period; rates for call money were lower, and those for time money, represented by commercial paper, averaged nearly 1 per centabelow the rate in March, both in New York and Chicago.

The entire operation of the Panama payment, owing to the preparatory work done, thus occupied the "financial engineers" actively only five weeks (April 23 to May 28); and so skilfully were the details handled that there was at no time any manifestation of uneasiness, if we except the usual stock-market canards, appearing on the days of the largest gold shipments—and even these were too flimsy to receive serious attention.

The conditions were, it is true, unusually favorable to such a result; nevertheless, the fact that New York bankers took every advantage of these conditions both here and abroad, facilitating gold exports before the Treasury disbursed its funds, thus spread-

ing the shipments over several weeks; and the further fact that Secretary Shaw timed the actual delivery of cash, under his calls upon the depository banks, so judiciously that these very large transactions caused no embarrassment, all co-operated to enable the great payment to be made upon the cheapest possible terms and with no disturbance whatsoever.

The total export of gold amounted to \$60,900,000, including therefore \$20,900,000 on account of other transactions, chiefly, no doubt, the Japanese transfers and loan. The entire sum was, be it observed, taken from the volume of money "in circulation," i. c., outside the Treasury; for although the \$40,000,000 were government funds, the actual cash was provided from depository bank vaults. The Treasury lost, it is true, about \$14,000,000 of its own cash between April I and June I, but this was due to other disbursements. The statement in Table V shows that the money in circulation diminished only \$7,300,000 in the two months, and the gold portion thereof only \$4,700,000; so that our great loss of gold was nearly made up by the other Treasury payments, the product of our mines and the sums received from Japan. The excessive supply of money continued.

It is proper to note that the enormous operations herein reported were possible of execution, without disturbances, largely owing to the fact that the American banking system has, during the last decade, developed in facilities to a degree hardly dreamed of a generation ago; the establishment of several institutions with very large capital and other means, and the concentration of power thus obtained, were indispensable requisites to the carrying out of such transactions. The New York city banks in 1894 had total capital and surplus \$132,000,000 and deposits \$504,000,000; against \$251,000,000 and \$1,109,000,000, respectively, in 1904.

Nor must it be lost sight of that the Panama payment would have been much more difficult to accomplish without danger, but for the modification of the Sub-Treasury law in 1861, permitting public moneys to be deposited in banks. The disbursement of so large a sum as was required, in actual cash, by the Treasury, might have caused serious complications and disturbances in money rates.

Turning now to the situation abroad: Despite the continued active demand for gold exhibited in London on the part of the French banks, the certainty that New York would soon supply a large amount caused the Bank of England to reduce its discount rate from 4 to 3½ per cent, as early as April 14, following this the next week with a reduction to 3 per cent, placing it on an equality with that of the Bank of France. The open market rate also declined, eventually to a point below that in Paris. (Table III.)

The Bank of England's gold stock was reduced between April 1 and June 9 from £34,063,000 to £33,382,000; but the movement was due almost entirely to home demands, and its ratio of reserve to liabilities actually rose.

The Bank of France, into which substantially all of the specie imported into France goes, increased its gold holdings to a point beyond all record in its long history; on April 1 the figures were £94,503,000; on June 9 £112,343,000—a gain of £17,840,000, or approximately \$89,000,000.

Since the total exports from New York to Paris amounted to \$60,900,000, it is obvious that the French institution gained fully \$28,000,000 from other points, substantially all from London. But with a huge Russian war loan to be handled, and with the uncertainty as to the direction which the Panama money would take in the investment field, the bank maintained a 3 per cent. rate; the open market rate, however, promptly fell below 2 per cent., declining indeed to 1½ by the middle of June. The demand for gold was, however, satisfied; the rate of exchange on London jumped to 25 francs 20 centimes in the second week in June.

A curious fact, of more than ordinary interest, is worthy of being noted here: the gold sent to the United States by Japan, transmuted, so to speak, was sent to Paris to be loaned to Russia, for the purpose of furnishing munitions of war to fight the Mikado's men.

Maurice L. Muhleman.

NEW YORK CITY.