

Presented by the Worshipful Company of Goldsmiths. 1903.



MODERN CAMBIST;

FORMING A MANUAL OF

FOREIGN EXCHANGES,

IN THE

DIRECT, INDIRECT, AND CROSS OPERATIONS

OF

BILLS OF EXCHANGE AND BULLION;

INCLUDING AN EXTENSIVE INVESTIGATION OF

THE ARBITRATIONS OF EXCHANGE,

ACCORDING TO THE PRACTICE OF THE FIRST

BRITISH AND FOREIGN HOUSES.

WITH

NUMEROUS FORMULÆ AND TABLES

OF THE WEIGHTS AND MEASURES OF OTHER COUNTRIES, COMPARED WITH

THE IMPERIAL STANDARDS.

BY WILLIAM TATE.

SECOND EDITION.

LONDON:

EFFINGHAM WILSON, ROYAL EXCHANGE.

LIVERPOOL:

J. AND G. ROBINSON, 45, CASTLE STREET.

PARIS: '

A. AND W. GALIGNANI, 18, RUE VIVIENNE.

MDCCCXXXIV.

PREFACE.

In the composition of an extensive work on Exchanges upon which I have been for some years engaged, I found it necessary to combine, in the form of an introduction, the explanations of the principles of those arithmetical processes which are of general application, in order both to save much repetition, and to admit of that minuteness which is requisite to give a clear conception of their purport. This however could not well be accomplished without the working of many examples, and the use of many formulæ, and when these were introduced the whole appeared too bulky, and, I may add, too elementary to constitute part of a treatise confined to the Practice of Exchanges. I have therefore adopted the suggestion of some of my commercial Friends, and made a separate volume of these materials, united with a brief notice of other subjects of most general utility; considering that the whole would form a compendium very convenient for reference, and would contain sufficient information to answer the purposes of many of those who desire to consult a Work upon Exchanges.

The arrangement which I have chosen being fully explained by the Table of Contents, it is unnecessary here to enter into any detail respecting it; and it may be considered almost as anticipating objections, to observe, that in the Direct Exchanges the limits of an introduction required the elucidation to be as concise as possible, although in some respects I have deviated from this rule, where any thing peculiar, and not generally understood, gave the matter more than ordinary interest.—Upon a comparison of my formulæ of the Courses of Exchange with those of other writers, much variation will be found to exist; and as all who have treated upon this subject are usually considered as very competent to investigate it, I must leave it to practical Cambists to decide between us. The same remark applies to the manner in which I have exhibited the comparisons of arbitrated rates of Bills of Exchange; but the superiority of my authorities makes me confident it will be found in strict conformity with the practice of the great commercial Houses, both in this Country and on the Continent.

By the introduction of some algebraic formulæ I have endeavoured to facilitate the calculations of preferable and equivalent rates, in what are termed Banking Operations; their importance, their constant occurrence in the business of the Counting House, and the silence in which, with a single exception, they have been passed over by English Cambists, must plead my excuse for the length at which I have treated upon them.—It is for similar reasons that I have occupied so much of the latter part of this Work with Bullion Operations, in which I have carefully followed the regulations of the Mint, and of the Bank of England: in the account I have also given of the practices of other

Countries, I have been equally guided by official documents, which the friendship of many distinguished individuals has placed at my disposal.—The Tables accompanying the Equations have been abridged from a set which was expressly calculated for the use of some large Houses concerned in these operations, and their utility is therefore confirmed by experience.

Minutiæ of detail, and authorities for my estimations of Foreign Monies, Weights, and Measures, necessarily belong to my larger Work, in which it has been my endeavour to exhibit, on an extensive scale, the present practice of Exchanges, accurately coinciding with the usages observed in these negociations; but notwithstanding the following pages are chiefly designed to aid the study of the elements of Exchange Operations, I have employed equal care to make my deductions from real transactions, and to avoid the erroneous and obsolete statements which have usually embarrassed the consideration of this subject.

W. TATE.

Queen Street, Cheapside, London, June 1, 1820.

ADVERTISEMENT

TO THE SECOND EDITION. .

In consequence of the changes that have taken place since the publication of the first Edition, in the different subjects of this Treatise, some correspondent alterations have necessarily been required, particularly with respect to the statements and formulæ connected with the operations in Bar Gold at Hamburg, which have been made to agree with the present valuation from the price of the Cologne or Hamburg Mark weight of fine Metal, in place of its former suppositious division into Ducats. It is to be observed, that the whole of the matter having been stereotyped, in order to avoid too extensive a correction of the plates, a few immaterial verbal inaccuracies have been suffered to remain, as Tarif for Tariff, and no change has in general been made in the Courses of Exchange in which the prices have been considerably altered, but without their having undergone any alterations in the forms of the rates, as in the Course of Exchange for Constantinople.

I have to offer my grateful acknowledgments for the flattering testimonials of the utility of this Work, which have been bestowed upon it by many distinguished English and foreign Cambists; and I beg leave to announce that I have prepared for publication a Key to the whole of the calculations as they are now arranged, and to recommend to the notice of the young Student, my Son's New System of Arithmetic, which he will find to contain much valuable information on the elementary principles of Exchange operations.

W. T.

CONTENTS.

PART I.

EXCHANGE OPERATIONS.

Foreign Exc	hang	ges	Defir	ition	S	•	•	•	•		P.	AGE l
]	DIRE	CT]	EXC	HA	NGE	s.				
Great Britai	n		Weig	hts a	nd M	ensu	res	-	•	•	•	2
			Excl	iange	s of .	Londo	on on					
France			Paris	and :	Bourd	leaux	ζ	•		•		£
Netherlands			Ams	terda	m, Ro	ottero	lam,	and A	Intw	erp		13
Hamburg			•		•	•			•			17
Prussia			Berl	in	•	•	•	•				21
Russia	•		St. P	eters	burg		•	•	•	•	•	23
Frankfort on	the	Mai	in		•		•	•		•		25
Austria			Vien	na an	d Tr	ieste		•	•			28
Lombardo-V	ene	lo	Veni	ce	•	•	•	•	•	•	•	31
Naples			•		•	•	•	•	•	•	•	33
Palermo	-	•	•	•	•	•	•	•	•	•	•	38
$\mathbf{Leghorn}_{\ell}$			•	•	•	•	•	•	•	•	•	37
Genoa	•		•	•	•	•	•	•	•	•	•	39
Spain .	•		Madr	id, Ca	idiz,	Mala	ga, a	nd B	arcelo	na	•	4]
Gibraltar	•		Lisbo	n and	i Opo	rto	•	•	•	•	•	4
Portugal	•	•	•	•	•	•	•	•	•	•	•	47
Exe	ercis	es on	Rates	of E	xchar	ıge	•	•	•		•	50

Exchanges on London of

				_			_				t	AGE
Bremen	•		•	-			•	•	•			51
Lubec	•		•	•	-	•	•	•	•	•	•	52
Denmark			Copen	hagen	ı				•	•	•	53
Sweden and	Nor	way	_	_						•		54
Turkey .			Const	antino	ple		•	•	•			55
Egypt .	•	•	Alexa		•	Cairo						56
The Ionian							•	•	•			57
Malta .			•		•	•				•		58
Rome .				•	•	•			•			59
Lombardo-V	enet	o	Milan		•		•				•	60
Switzerland			Genev	a a	•	•		•	•	•		σl
			Basil					•				62
			St. Ga	ıllen				•		•		63
Bavaria .			Augsb	urg				•	•	•	•	64
Saxony .			Dresde	•	l Le	ipzig						65
E	xerc	ises	•	•	•	•	•	•				66
North Amer	ica		Britis	h Cole	onies	and	Wes	t Ind	ies			67
			Unite	d Stat	es	•		•				68
E	xero	ises	•	•	•	•	•		•		•	73
South Ameri	ica		Spanis	h Set	tlem	ents			•		•	74
			Portug	guese	Ditt	o		•			•	75
E	xerc	ises	•	•	•	•	•	•				76
East Indies			Calcut									
			Madra									
Cape of Good	d Ho											
			-								•	79
												•

CROSS EXCHANGES.

Paris — on Amsterdam, Hamburg, and Frankfort	•		80
Amsterdam — on Paris, Hamburg, and Frankfort			81
Hamburg — on Paris, Amsterdam, and Frankfort	•	•	82
Frankfort — on Paris, Amsterdam, and Hamburg	•		83
Exercises			

110

112

113

114

116

. 118

. 111

INDIRECT EXCHANGES.

SIMPLE ARBITRATIONS.

					P	AGE
Principles		•	•		•	87
Arrangement of the terms of an Equation			•			91
The formation of fixed Numbers .	•	•		•		93
Example of Arbitrated Rates between Lond	ion a	nd Pa	aris tl	hroug	h	
Amsterdam, Hamburg, Frankfort, and Le	eghor	m	•	•		95
	•		•			97
Examples of Remittances and Drafts with I	Direc	t and	Arb	itrate	d	
Rates						99
Exercises and Formulæ				•		102
London and Paris through Amsterdam, Har	nbur	g, Fr	ankfo	rt, ai	nd	
Vienna, Leghorn, Genoa, Naples, and Ma		-•		•		103
London and Amsterdam through Paris, Ha			rankf	ort,		
Vienna, Leghorn, Genoa, Naples, and M		_		•		104
London and Hamburg through Paris, Amst			rankf	ort,		
Vienna, Leghorn, Genoa, Lisbon, and M				•	•	105
, , , , , , , , , , , , , , , , , , ,						
,						
COMPOUND ARBITI	олт	ΙΩΝ	re:			
COMPOUND ARBITI	na 1	ION	· · ·			
	_					
wa • • •						
Principles	•	•	•	•	•	109

London and Paris through Amsterdam in direct Bills

Indirect from London, direct from Amsterdam

Direct from London, indirect from Amsterdam

Ditto to circuitous Operations .

— principles

Indirect from London and from Amsterdam

Circuitous Exchange

Application of Charges

Exercises

BANKING OPERATIONS.

							Ŧ	AGE
Introduction and Formulæ	•	• 5			•	•	•	121
Comparisons of Remittances		•	•	•	•	•	•	124
- Drafts		•	•	•	•	•	•	125
- Remittances		rafts	•	•	•	•	•	126
The finding of equivalent R	ates .	•	•	•	•	•	•	128
Exercises	• •	•	•	•	•	•	•	132
				-				
	70 A T	ver II						
	PAF	RT II	•					
	•							
	037 6			 .				
BULLI	ON C	PERA	ATIC)NS.	•			
Introduction	• •	•	•	•	•	•	•	134
_		_ 						
VALUA	TION	OF 1	BUL	LIO	N.			
			0 75 6					
BRI	ITISH	REP	ORT	is.				
-								
•								
The standarding and valuin	_			•		•		136
Exercises			•	•	•	•	•	142
The standarding and valuin	•	lver	•	•		•	•	144
Exercises		· ·		•	•		•	148
The valuing of Gold and Si	1061 14	utings	•	•	•	•	•	150
_								
	~~~ <i>~</i> ~ ~ ~ ~	*******	. O D	met				
FRI	ENCH	REI	OK	15.				
_			<del></del> ,					
Reduction of Reports	•		•	•	•	•	•	154
			•	•	•	•	•	157
— of Gold and Silve	er	• •	•	•	•	•	•	158
Exercises .	•		•	•	-	•	•	159
Tarif Rates and British Re	-						•	160
Ditto - ditto - of Silv	zer .		_			_		162

## NETHERLAND REPORTS.

Assays,	Examples, and	Exercises	3	•	•	•	•	•		IG4
		GERMA	N R	EPO	RTS	S.				
Assays Reducti	on of Reports	•	•	•	- <del>-</del>	•	•	•	•	165 166
	on of Gold	d Exercis	es	•	•	•	•	•	•	167 168
	ARBITRA	TED P	ARS	OF	EX	CH.	ANG	æ.		
		·	<del></del> -					•		
Introdu	ction		•	•			•	•	•	169
Paris	Formula and	· · ·	D.,		•	•	•	•	•	171
	Formula and	ranie for		_		•	•	•	•	172
				ıbloon		•	•	•	•	173
				: Silve	er	•	•	•	•	174
				llars	•	•	•	•	•	175
Amster	dam		וטכד	lar Sil	iver	•	•	•	•	176
mister	Formula and	Table for	· Day	Cala	•	•	•	•	•	178
	Tolujuia and	Table 101		-		•	•	•	•	179
				ubloor · Silve		•	•	•	•	180
				llars	er.	•	•	•	٠	182
Hambu	ræ		170.	1141.2	•	•	•	•	•	183
	Formula and	Table for	Bar	· Gold		•	•	•	•	184 185
		20010 202		ubloon			•	•	•	186
				lar Sil	_	•		•	•	188
				Silve						190
Frankf	ort		•		•		•			191
	Formula and	Table for	Bar	Gold	•	•		•		192
			Bar	Silve	r	•	•	•		193
			Dol	lars	•	•	•			194
Berlin,	Petersburg, N					•	•		•	195
	Formulæ for	•	Bar	Gold	•	•	•		•	196
_		•		Silve		•	•	•	•	197
Examp	les of the appli	cation of t	he T	'ables	•	•	•	•	٠	198
	Exercises	_								ብበብ

# BANKING OPERATIONS.

								T.	AGE
Introduction and	Formulæ	•	• •			•			121
Comparisons of R		_			_	_			124
•	rafts .	•	·	•	•	·	_		125
_	emitlances a	nd Deal	te Pe	•	•	•	•	•	126
The finding of eq	-					÷.	-	•	128
Exercises	шумене пас	<b>c</b> s .	•	•	•	•	•		132
Exercises	• • •	•	•	•	•	•	•	•	102
					_				
		рарт	' TT						
	-	PART	ΤŢ	•					
		****	~~						
	BULLIO	N OP	ER A	ATI(	NS				
	DOLLIO	IN OI	Litt	111	) I 1 1 0 .	•			
	<del></del>	<del></del>							
Introduction		•	•	•	•	•	•	•	134
							•		
	VALUAT.	ion c	<b>)</b> [	RTIT	ΙΙΩ	NT.			
	VALUAI.	ION (	<i>)</i>	DUL	LIU.	LN .			
		<del></del>		<del></del>					
				<u> </u>					
	BRIT	ISH F	REP	ORT	S.				
_			_						
The standarding	and valuing	of Gold	_	_					136
Exercises	_								142
							•		
The standarding	·		:T	•	•		•		144
Exercises			•		•		•	•	148
The valuing of C	fold and Shy	er Paru	ugs	•	•	•	•	•	150
	FRE	NCH	REI	) An	rs.				
	T ICES	VOII	ICIJI	OIC.	101				
Reduction of Re	ports					•	•		154
Valuation of Ta	rif Rates	•	•	-	•	_	_		157
	ld and Silver							•	158
Exercises							•	•	159
	_		46:11	_			•	•	_
Tarif Rates and	· · · · · · - · -						•	•	160
Ditto - ditto	<ul> <li>of Silve</li> </ul>		•	•	•	•	•	•	162

## NETHERLAND REPORTS.

Assays, l	Examples, and	Exercises		• •		•	•	•	•	AGE 164
		GERMA	N R	EPO	RTS	S.				
Assays			•	•	•	•	•	•	•	165
	on of Reports	•	•	•	•	•	•	•	•	166
Valuation	on of Gold	• •	•	•	•	•	•	•	•	167
-	Silver, ar	d Exercise	25	•	•	•	•	•	•	168
	ARBITRA	TED PA	ARS	OF	EX	CH	ANG	ЭE.		
Introdu	ction		•	•	•	•	•	•	•	169
Paris			•	•	•	•	•	•	•	171
	Formula and	Table for	Bar	Gold	•	•	•	•	•	172
			Dou	bloom	3	•	•	•	•	173
			_	Silve	r	•	•	•	•	174
			Doll		•	•	•	•	•	175
	•		Doll	lar Sil	ver	•	•	•	•	176
Amster	_	• •	•		•	•	•	•	•	178
	Formula and	Table for			•	•	•	•	•	179
				iploon		•	•	•	•	180
				Silve	r	•	•	•	•	182
Hambu	ra.		Dog	lars	•	•	•	•	•	183
Hambu	Formula and	Table for	Rar	Gold	•	•	•	•	•	184 185
	I official faire	Tubic ici		ıbloon		•	•	•	•	186
				lar Sil			•		•	188
				Silve				•	_	190
Frankfo	ort				-		Ì	•		191
	Formula and	Table for	Bar	Gold	•	•				192
				Silve			•		•	193
				lars				•	•	194
Berlin,	Petersburg, N	laples, and	List	bon						195
	Formulæ for	_					•	•	•	196
	_		Bar	Silve	r	•	•	•	•	197
Examp	les of the appl	ication of t	he T	ables	•	•	•	•		198
	Exercises					_				200

# ARBITRATED COMPOUND PARS OF EXCHANGE.

Introduction	AGE 204 206 207 208
Formula for Arbitrated Cross Pars from Gold	206 207
_ Compound Ditto	207
-	-
Exercises	200
<u> </u>	
ARBITRATED PRICES OF BULLION.	
Introduction	209
Formula and Table for Bar Gold and Bar Silver Amsterdam	210
Formula and Table Ditto	211
Formula and Table Ditto	212
Formula and Table . Ditto	213
Formula for Bar Gold	214
— Bar Silver	215
Examples of the application of the Tables	216
Exercises	218
APPENDIX.	
ARBITRATIONS OF MERCHANDISE.	
<del></del>	
Bourdeaux and London — Arbitrated Price	220
Leghorn and London . Ditto ·	
London and Hamburg — Profit per Cent	

# FOREIGN EXCHANGES.

Foreign Exchanges are transfers from the money of account of one country to that of another, by the operation of Bills of Exchange.

A Bill of Exchange is a written order for the payment of a specified amount in the money of one of the places concerned, the equivalent amount in the money of the other place being calculated by a rate of Exchange.

A Rate of Exchange is the price of the money of one country reckoned in that of another country. Of the two terms of the rate, one is a fixed or invariable, and the other is an uncertain or variable, price. Thus between London and Paris, the rate of exchange is the value which is given for the £ Sterling, in a variable sum in Francs and Cents. The former sum is therefore the fixed price, and the latter the variable or uncertain price. Also between London and Lisbon, the rate of exchange is the value in Pence Sterling which is given for the Milreis, and therefore in this rate the Sterling money is the variable price.

When the fixed price is in the money of the country, that place of exchange is said to receive the variable price: when the uncertain price is in that money, it is said to give the variable price.

Thus London receives from Paris — Francs — Cents for 1 £ Sterling, and

London gives Lisbon — Pence for 1 Milreis.

A Course of Exchange is a list of the rates of exchange of the given place, on the different places with which it transacts exchange business.

The operations of Exchanges are usually divided into Direct, Cross, and Indirect or Arbitrated.

## DIRECT EXCHANGES.

DIRECT Exchanges are the operations of exchange between two Countries, from their own rates of Bills of Exchange, without the medium of any other place.

## GREAT BRITAIN.

### LONDON.

ACCOUNTS are kept in Pounds, Shillings, and Pence; which money is called Sterling, to distinguish it from the Colonial Money, and from some Monies of the Continent which bear similar denominations.

The rate of the value of the Pound Sterling in Gold, is for 1869 Sovereigns, or Pounds, to be coined out of 40 Troy Pounds' weight of Gold 11-12 ths fine. The full weight therefore of a Sovereign is Dwts 5  $3\frac{171}{623}$  Grains, and the fine weight is  $113\frac{1}{623}$  Grains.

The rate of Coinage for Silver, is 66 Shillings from 1 lb troy of Silver 37-40 ths fine. The full weight of a Shilling is therefore Dwts 3  $15\frac{3}{11}$  Grains, and the fine weight  $80\frac{8}{11}$  Grains.

N. B. In the following estimations of the Gold Coins of other Countries, they are valued at the above mintage rate of £ 3 17 10½ per Oz. British Standard; but the Silver Coins are rated at the assumed price of 60 Pence per Oz. British Standard.

#### WEIGHTS AND MEASURES.

The Gold and Silver weight is the Troy Pound of 12 Ounces. The Ounce is 20 Dwts each of 24 Grains.

The Commercial Weight is the Pound Avoirdupois, weighing 7000 Troy Grains: 112 Pounds make 1 Cwt, and 20 Cwt 1 Ton. The Pound is divided into 16 Ounces, each of 16 Drams.

The Measure for Liquids is the Imperial Gallon. Its contents of distilled Water of the temperature of 62 Degrees of Fahrenheit's thermometer, or 13\frac{1}{3} Degrees of Reaumur's thermometer, weigh 10 lb Avoirdupois, or 70,000 Troy Grains, and it is computed to measure 277.274 Cubic Inches. The Gallon is divided into 4 Quarts or 8 Pints.

The Measure for Seeds and Dry Goods is the Imperial Bushel of 8 Imperial Gallons. Its contents are therefore 2218.192 Cubic Inches. 8 Bushels make 1 Quarter; and 10 Quarters 1 Last.

The usual Commercial Measure of length is the Yard of 3 Feet or 36 Inches. An Ell is 5 quarters of a Yard. 1760 Yards make 1 Mile, called a Statute Mile, as being fixed at this length by Act of Parliament; it is also so called to distinguish it from the Geographical Mile, or 60 th part of a Degree of the Meridian, which Degree in the Latitude of London, reduced to the level of the sea, is computed at 69.146 Statute Miles.

The chief of the late Measures of Capacity were, the Wine Gallon of 231 Cubic Inches, the Beer Gallon of 282 Cubic Inches, and the Winchester Bushel of 2150.42 Cubic Inches.

Hence 5 Imperial Gallons are nearly 6 Wine Gallons, and 31 Imperial Bushels nearly 32 Winchester Bushels.

The Standards of the Weights and of the Measures of length are the same as formerly; but the working Standards or Models of the Weights having become diminished by use, they were altered to the correct weights when the Imperial Standards of Capacity were adopted.

# **TABLES**

OF THE

## RELATION OF THE IMPERIAL WEIGHTS AND MEASURES

TO THE

### CHIEF WEIGHTS AND MEASURES OF THE CONTINENT.

## TROY WEIGHT.

# 100 Ounces Troy are equal to, in

			•
France	-	3.11002	Kilogrammes of 1000 Grammes.
Netherlands	-	3.11002	Ponden or Kilo. of do.
Hamburg	•	13.3037	Cologne Marks of 16 Loths.
Prussia	•	13.301	Prussian Marks of 16 Loths.
Sweden	•	14.769	Marks of 16 Lods.
Russia.	•	7.597	Pounds of 32 Loths or 96 Solotnicks.
Turkey	•	9.696	Chequees of 100 Drams.
Austria	•	11.077	Vienna Marks of 16 Loths.
Naples .		116.363	Neapolitan Ounces.
Spain .	•	13.518	Castilian Marks of 8 Ounces.
Portugal		13.553	Marks of 8 Ounces.

### AVOIRDUPOIS WEIGHT.

# 100 lb Avoirdupois are equal to, in

France	•	45.35	Kilogrammes.
Netherlands	•		Half Ponden or Kilogrammes.
Hamburg	•		Pounds of 16 Ounces of 32 Loths.
Denmark	•	90.80	Pounds of 32 Lods.
Prussia		96.98	Pounds of 16 Ounces.
Sweden	•	106.71	Pounds, Victualie Weight.
Russia.	•	110.78	Pounds of 32 Loths.
Turkey, Con	stant.	35.35	Okes of 400 Drams.
Austria	•	80.96	Pounds of 16 Ounces.
Naples.	•	141.41	Pounds of 12 Ounces.
Leghorn	•	133.58	Pounds of 12 Ounces.
Genoa .	•	143.10	Pounds of 12 Ounces.
Spain .	•	98.57	Pounds of 16 Ounces.
Portugal	•	98.82	Pounds of 16 Ounces.

# TABLES CONTINUED.

# 112 lb Avoirdupois are equal to, in

	France .			50.79	Kilogrammes.
•	Netherlands		•	101.59	Half Ponden.
	Hamburg	•	•	104.85	Pounds.
	Denmark	•	•	101.69	Pounds.
	Prussia .		•	108.62	Pounds.
	Sweden			119.50	Pounds.
	Russia .	•	•	3.102	Poods of 40 lb.
	Turkey, Cons	stant.		39.59	Okes.
				90.67	Pounds.
	Naples .			0.5702	Cantaro of 100 Rottoli.
	Leghorn		•		Quintal of 100 Pounds.
	Genoa .				Cantaro of 100 Rottoli.
	Spain .		•	4.416	Arrobas of 25 lb.
	Portugal	•		3.459	Arrobas of 32 lb.
		-	-	= • = •	

# 100 Imperial Gallons are equal to, in

France.	•		454.34	Litres.
Netherlands	•	•	454.34	Kans.
Hamburg		•	62.75	Viertels, 20 to 1 Ahm.
Denmark	•	•	58.79	Viertels, 30 to 1 Oxhott.
Prussia.	•		396.79	Quarts, 64 to 1 Eimer.
Sweden.	•	•	173.66	Kannen, 30 to 1 Eimer.
Russia .	,	•	36.97	Wedros, 18 to 1 Oxhoft.
Turkey .	•		86.54	Almudes.
Austria.	•		8.03	Eimers.
Naples .			10.97	Barile of 60 Caraffi.
Leghorn		•	9.96	Barile of 20 Fiasche.
Do	•	•	13.58	Barile of Oil.
Genoa .		•	6.12	Barile.
Spain .	•	•	28.10	Cantaros of 8 Azumbras.
Portugal	•	•	27.47	Almudes of Lisbon.
Do	•	•	17.83	Ditto of Oporto.

# TABLES CONTINUED.

# 10 Lasts or 100 Imperial Quarters are equal to, in

France .	•	290.77	Hectolitres.
Netherlands	•	9.69	Lasts of 30 Mudde or Hectolitres.
Hamburg	•	9.18	Lasts of 30 Scheffels.
Denmark	•1	17.42	Lasts of 12 Toendes.
Sweden .	•	176.41	
Prussia .	•	7.34	Lasts of 72 Scheffels.
Russia .	•	138.64	Chetwerts.
Turkey .	•	828.41	Killows of Constantinople.
Austria .	•	472.86	Metzen.
Naples .		568.58	Tomoli.
Leghorn .	•	397.89	Sacks.
Genoa .	•	241.51	Mine.
Spain .	•	514.78	Fanegas.
Portugal .	•	2151.5	Alqueires of Lisbon.
Do		1704.7	Ditto of Oporto.

# 100 Yards English are equal to, in

France .		91.43	Metres.
Netherlands	•	91.43	Ells or Metres.
Hamburg	•	159.58	Ells.
Denmark	•	145.67	Ells.
Sweden .	•	<b>154.00</b>	Ells.
Prussia .	•	137.10	Ells.
Russia .		128.57	Arshines.
Turkey:		135.21	Pikes.
Austria .	•	117.35	Ells.
Naples .		43.27	Canne of 8 Palmi.
Leghorn .	•	153.87	Braccia.
Genoa .		36.575	Canne of 10 Palmi.
Spain .		107.83	
Portugal.	•		Varas.

### COURSE OF EXCHANGE.

## London receives from

Amsterdam	<b>12</b> 3	Florins and Stivers	for 1 :	£ Sterling.
Hamburg	13 12	Mks and Schill.	1	£ Sterling.
Paris	<b>25</b> 50	Francs and Cents	<b>— 1</b> :	£ Sterling.
Frankfort	$150\frac{1}{2}$	Batzen.	<b>→ 1</b> :	£ Sterling.
Vienna	10 2	Florins and Kreuz.	<b>— 1</b> :	£ Sterling.
Genoa	$25\ 35$	Lire and Centisimi	<b>— 1</b> :	£ Sterling.
Berlin	6 25	Dollars and Silver C	iros. 1	£ Sterling.

## London gives to

St. Petersburg	103	Pence	Sterling for	1	Ruble.
Madrid	$36\frac{3}{4}$	Pence	-	1	Dollar of Plate.
Gibraltar	$48\frac{1}{2}$	Pence		1	Hard Dollar.
Leghorn	$48_{4}^{3}$	Pence		1	Dollar or Pezza.
Naples	395	Pence		1	Ducat.
Palermo	$116\frac{1}{2}$	Pence		1	Onza or Oncia.
Venice	47	Pence		6	Lire Austriache.
Lisbon	49	Pence		1	Milreis.
Rio de Janeiro	30	Pence	<del>-</del>	1	Milreis.

The rates of Rotterdam and Antwerp are similar to the Amsterdam rate. That of Altona is similar to Hamburg, but by custom it is usually quoted ½ Sch. Bco more, or, as it is called, worse. The Trieste rate is similar to the Vienna rate, and the Cadiz, Bilboa, Barcelona, and Seville rates are similar to that of Madrid.

----

The Usance of Bills drawn from France, Holland, and Germany is 30 days' date; from Spain and Portugal 60 days' date; and from Italy 3 months' date.*

The days of grace are 3. Bills are not presented for payment until the 3rd day, except this is a Sunday, Christmas-Day, or Good-Friday, when the Bill is reckoned due on the day before.

^{*} The term Usance means the customary or usual time for which Bills are drawn from the given place, upon the place of payment. Double usance signifies double that time.

In Bills drawn from London it is most usual to specify the time; and in general, abroad, the practice of drawing Bills at usance is wearing away.

The days for the negociation of Foreign Bills of Exchange are Tuesdays and Fridays. These are called Foreign Post Days, being the principal Post Days in consequence of the exchange business. It is the custom in London with Houses of established credit, to pay for the Foreign Bills they buy on one post day, on the following post day, when they receive the second and third Bills of Exchange.*

The Stamp Duties are paid by the Seller or Drawer.

The Brokerage on Bills is 1 per 1000; or 1-10th per Cent.

The present Stamp Duties on Sets of Bills, are for each Bill,

not above	£ 100	One Shilling and Sixpence.
	200	Three Shillings.
	500	Four Shillings.
	1000	Five Shillings.
	2000	Seven Shillings and Sixpence.
	3000	Ten Shillings.
and above		Fifteen Shillings.
	not above — — and above	<ul> <li>— 200</li> <li>— 500</li> <li>— 1000</li> <li>— 2000</li> <li>— 3000</li> </ul>

Bills drawn upon Great Britain or Ireland from abroad, are not required to be stamped.

^{*} Foreign Bills of Exchange are usually drawn in sets of three Bills, either of which being paid, discharges the claim upon the other two.

# FRANCE.

#### PARIS. BOURDEAUX.

100 Centimes = 1 Franc.

~~^~~~

Francs are also divided, nominally, each into 20 Sous, called Sous of Francs, the Sou being a piece of 5 Centimes or Cents.

The 20 Franc Piece in Gold is, at the full rate, worth 15 s  $10\frac{1}{4}$  d; and the 5 Franc Piece in Silver, 3 s 11 d Sterling. The Par in Gold is Fr. 25.22 Cents, and in Silver Fr. 25.57 Cents.

The former money of account was in Livres, Sous, and Deniers. 81 Livres are equal to 80 Francs.

100 Kilogrammes	=	220.48 lb Avoirdupois.
100 Litres	=	22.01 Imperial Gallons.
100 Hectolitres	=	275.12 Imperial Bushels.
100 Hectolitres	=	34.39 Imperial Quarters.
100 Metres	=	109.36 English Yards.

# COURSE OF EXCHANGE.

## Paris gives to or receives from

London	25.40	Francsand	Cts. for	1	£ Sterling.
Amsterdam	$57\tfrac{1}{2}$	Florins		120	Francs.
Berlin	3.62	Francs and	Cts.—	1	Prussian Dollar.
Frankfort	<b>2</b>	per Ct. los	s		
or	98	Francs at F	Paris—	100	Francs at Frankfort.
Genoa	$\frac{1}{4}$	per Ct. pre	ofit.		
or	$100\frac{1}{4}$	Francs		100	Lire.
Hamburg	185	Francs	<del></del>	100	Marks Banco.
Leghorn	509	Centimes		1	Pezza.
Lisbon	617	Reis		3	Francs.
Madrid	<b>15.40</b>	Francsand	Cts.—	1	Pistole of Plate.
Milan	84 <u>}</u>	Centimes		1	Lira Austriacha.
Naples	410	Francs	_	<b>100</b>	Ducats del Regno.
St. Petersbu	$rg 107\frac{1}{2}$	Centimes		1	Ruble.
Vienna	_	Francs		100	Florins.

### EXAMPLE 1.

To exchange £ 500 into Francs at Fr. 25.42½ Cts.

Francs 12712.50 Cents.

421 Centimes are here expressed as 425 Millièmes.

## EXAMPLE 2.

To exchange £ 454 10 6 into Francs at 25.25

Francs
454.525 amount at 1 Franc per £.
25.25
11363125

Francs 11476.76 Cents.

When the shillings and pence in the Sum in Sterling are valued in decimal parts of a Pound, there must be as many figures rejected from the right of the Product, as there are decimal figures; and if, as in Ex. 1, the rate is rendered into Millièmes, an extra figure must also be struck off.

Instead of the above, we may multiply the rate by the number of the Pounds, and take parts for the shillings and pence; thus,

Francs	25.25	by	454	-
	11463.50	for	454	£
	$12.62\frac{1}{2}$		10	s
	63		6	d

Francs 11476.76 Cents.

### EXAMPLE 3.

To exchange Francs 11476,76 Cents into Sterling at 25.25

N. B. The lowest usual variation in the rate with London is  $1\frac{1}{4}$  Cents; as 20,  $21\frac{1}{4}$ ,  $22\frac{1}{2}$ ,  $23\frac{3}{4}$  Cents, &c. In case the rate contains a fraction, the first and third terms may be multiplied by 2 or 4

#### EXERCISES.

### Exchange

- Ex. 1. £ 1000 into Francs at 25.17½
  - 2. £ 248 12 6 into Francs at 25.35
  - 3. £ 554 13 7 into Francs at 25.41 \( \frac{1}{4} \)
  - 4. Francs 10,000 into Sterling at 25.45
  - 5. Francs 4782.50 Cents into Sterling at 25.37\frac{1}{2}
  - 6. Francs 8897.57 Cents into Sterling at 25.511

## PRODUCTS.

Ex. 1.	Francs 25175.00	Ex. 2.	Francs 6302.64
3.	Francs 14095.78	4.	Ster. £ 392 18 7
5.	Ster. £ 188 9 5	6.	Ster. £ 348 15 1

## EXAMPLE

### Of the Valuation of French Stock.

To find the Sterling Cost of 1000 Rentes in 3 per Cent and 5 per Cent Stock, the rate of the former being 75.25 and of the latter 102.20 per Cent, the charges on each being estimated at  $\frac{1}{2}$  per Cent, and the exchange on London being 25.20

3 per Cent. Stock.	5 per Cent. Stock.		
1000 Rentes?  3 — 100 Stock.  100 — 75.25 Francs.	1000 Rentes? 5 — 100 Stock. 100 — 102.20 Francs.		
Fr. 75.25 1000	Fr. 102.20 1000		
3)75250.00	102200.00		
125.42 Charges.	20440.00 102.20 Charges.		
Francs 25208.75 Cts.	Francs 20542.20 Cts.		
Fr. £ If 25.20 —— 1	Fr 25208.75 ?		

Answer. £ 1000 G 11 Sterling, the value of the 3 per Cent Stock.

Answer. £ 815 3 4 Sterling, the value of the 5 per Cent Stock.

# THE NETHERLANDS.

## AMSTERDAM, ROTTERDAM, AND ANTWERP.

******

100 Cents = 1 Florin.

The Florin is also divided into 20 Stivers,* and in the late money of exchange it was reckoned at 40 Grotes Flemish, of which 12 Grotes made 1 Schilling Flemish, 10 Schillings Flemish being equal to 3 Florins.

A Rixdollar, a nominal money, is 50 Stivers or  $2\frac{1}{2}$  Florins.

The value of the 10 Florin Piece in Gold is 16 s 6½ d Sterling, and of the Florin in Silver, 1 s 8 d, the Par in Gold being Flor 12.09 Cents, and in Silver, Flor. 11.97 Cents.

100	Ponden	<u></u>	220.48	lb Avoirdupois.
100	Kannen	<del>==</del> ·	22.01	Imperial Gallons.
100	Lasts	=	103.16	Imperial Lasts.
100	Ells	=	109.36	English Yards.

#### COURSE OF EXCHANGE.

### Amsterdam gives to

London	11.95	Florins an	d Cts for	1	£ Sterling.
Frankfort	36	Florins	*****	20	Rixdollars.
Genoa	$47\frac{1}{4}$		<b></b> ]	100	Lire.
Hamburg	35			40	Marks Banco.
Leghorn	97‡			40	Pezze.
Lisbon	$37\frac{1}{2}$		_	40	Crusados of 400 Reis.
Madrid	· 1003			40	Ducats of Exchange.
Naples	$79\frac{3}{4}$			40	Ducats del Regno.
Paris	$57\frac{1}{8}$		<del></del> 3	120	Francs.
St. Petersb	urg 101			20	Rubles, Paper.
Vienna	$36\frac{1}{8}$	<del></del>	_	30	Florins.

The Usance of Bills from England is 1 month's date.

There are no days of grace.

^{*} The Stiver is still used in the London rate of Exchange, but not in the Amsterdam rate.

### EXAMPLE 1.

To exchange £ 500 Sterling into Florins, at Florins 12 2½ Stivers.

Flor. 12  $2\frac{1}{4}$  St. = Flor. 12.11 $\frac{1}{4}$  Cents.

Florins.

12.1125

**500** 

Flor. 6056.25 Cents.

#### EXAMPLE 2.

400000000000

To exchange £ 864 17 4 Sterling into Florins at Flor. 12 **7**½ Cents.

£ 864 17 4 = £ 864.8666

Florins.

- 864,8666

12

10378.3992

43.243 for 5 Cents.

 $-2\frac{1}{2}$  --

21.621

Flor. 10443.26 Cents.

If, instead of this method, the rate should be multiplied by the number of Pounds Sterling, the 12 Fl. 75 Cents must be expressed as Flor. 12.075 In the above, the multiplier may be this number, but in the regular performance of the multiplication, it requires a greater number of figures than the taking of the parts.

#### EXAMPLE 3.

To exchange Flor. 6056.25 Cents into Sterling at Flor. 12 111 Cents.

Flor. £ Flor.

If 
$$12.11\frac{1}{4}$$
 — 1 — 6056.25?

 $48.45$  £ 24225.00

£ 4845) 2422500

£ 500 0 0 Sterling.

There being a quarter of a Cent in the rate, the extreme terms are multiplied by 4 to reduce it.

#### EXAMPLE 4.

To exchange Flor. 10443.26 Cents into Sterling at Flor. 12 7g Cents.

Flor. £ Flor.

If 
$$12.07\frac{1}{2}$$
 — 1 — 10443.26?

 $48.30$  £ 41773.04

£ 483 ) 417730.4

£ 864.866 = £ 864 17 4 Sterling.

The extreme terms are here multiplied by 4, instead of 2, to get rid of the fraction, in order to make fewer figures in the divisor, and if the multiplier in Ex. 3, had been 8 instead of 4, it would have had the same effect.

Formerly the rate on London was quoted in Schillings and Grotes Flemish; some houses still use this form, with which the calculation is made as in the following Example.

200

### EXAMPLE 5.

To exchange Flor. 6056.25 Cents into Sterling at 40 s  $4\frac{1}{2}$  g Flemish.

Reckoning 40 Sc. as 12 Florins, and  $4\frac{1}{2}$  Grotes as  $2\frac{1}{4}$  Stivers or  $11\frac{1}{4}$  Cents, the statement is made as in Ex. 4: otherwise,

Sc. Gr. £ Flor.

If 
$$40 \ 4\frac{1}{2}$$
 — 1 — 6056.25?

 $40$ 
 $484\frac{1}{2}$  242250.00

£ 4845 ) 2422500

£ 500 0 0 Sterling.

The principle of this form of calculation is derived from 12 Grotes making 1 Schilling Flem. and 40 Grotes, 1 Florin.

#### Exercises.

# Exchange

- Ex. 1. £ 1000 Sterling into Florins at Fi. 11.95 Cts.
  - 2. £ 1275 16 6 Sterling into Florins at Fl. 12 11 Stiv.
  - 3. Florins 8000 into Sterling at Fl. 12.05 Cents.
  - 4. Florins 475.35 Cents into Sterling at 11 Fl. 183 Stiv.
  - 5. £ 1000 Sterling into Florins at 39 s 10 g.
  - 6. Florins 5574.43 into Sterling at  $40 \text{ s } 1\frac{1}{2}$  g.

#### PRODUCTS.

Ex. 1. Flor. 11950.00 Ex. 2. Flor. 15405.59 Cents

3. £ 663 18 0 Ster. 4. £ 39 16 5 Ster.

5. Flor. 11950.00 6. £ 463 1 9 -

N. B. The Exchange of Antwerp on Paris is quoted either as 473 Florins for 100 Florins,

or as 2 per cent. profit on the par of 471 Florins for 100 Francs.

# HAMBURG.

12 Pfennings = 1 Schilling. 16 Schillings = 1 Mark.

3 Marks or 48 Schillings are called, in exchanges, a Rixdollar.

There are two valuations of Hamburg, otherwise Lubec, money; the one called Banco, and the other Currency.

Banco is a nominal valuation of the Cologne Mark weight of fine Silver, at  $27\frac{3}{4}$  Marks Banco;* from which estimation the Value of the Mark is  $17\frac{1}{2}$  d Sterling, and the Par of Exchange, 13 Mks  $10\frac{1}{2}$  Schill. per Pound Sterling. It is this money which is used in the accounts of wholesale business and in Exchanges, and it is of the same value as that called Flemish, 2 Grotes Flemish being equal to 1 Schilling Hamburg Banco; 32 Grotes to 1 Mark Banco; and 8 Schillings Flemish to 3 Marks Banco.

Currency is the value or rate of the coined money: this also is valued from the Cologne Mark weight of fine Silver which is to be coined into 34 Marks Current; hence the value of the 3 Current Mark Piece is 3 s 7 d, or of the Mark Current 14½ d Sterling, making 1 £ Sterling equal to 16 Mks 12 Sch. Current.

The difference between the value of Banco and Currency is called Agio. It is continually fluctuating, because the Market Price of fine Silver is always varying; at the above valuation the Agio is nearly  $22\frac{1}{2}$  per Cent.

When Goods at Hamburg are sold in Currency, the Agio is generally fixed either at 20 or 25 per Cent. The Agio is reckoned upon the Banco; and in a like manner the allowance called Rabat of 8\mathbb{g} per Cent, or 4\mathbb{g} per Cent, is reckoned upon the net amount. It is therefore to be noticed, that at 25 per Cent the Agio is 1-5 th of the Current or 1-4 th of the Banco; and at 20 per Cent it is 1-6 th of the Current or 1-5 th of the Banco; also that the Rabat at 8\mathbb{g} per Cent, is 13-163 rels of the given amount, and at 4\mathbb{g} per Cent it is 7 out of 107 parts.

^{*} The Cologne Mark weight, of the Hamburg Standard, is 3608 Grains troy, or 7 Oz. 10 Dwts 8 Grs troy; and this weight of fine Silver at the rate of 60 d Sterling per Oz. Standard, is worth 40 s 7½ d Sterling.

## WEIGHTS AND MEASURES.

100 Marks	<del>==</del>	$751 rac{\circ}{3}$	Oz. Troy.
100 lb	=	106.82	lb Avoirdupois.
100 Viertels	=	159.35	Imperial Gallons.
100 Lasts	=	108.85	Imperial Lasts.
100 Ells	=	62.66	Yards.

# COURSE OF EXCHANGE.

Hamburg, in Banco, gives to or receives from

London	13 8	Mks and Sch.	for	1 :	€ Sterling.
Amsterdam 3	<b>35 40</b>	Florins and Cts		40	Marks Beo.
Augsburg	147	Florins		200	Do.
Berlin	152	Pruss. Dollars		300	Do.
Copenhagen	204	Rix-Bco Dollars	—	300	Do.
Frankfort	$148\tfrac{1}{4}$	Rixd. W. Z.	_	300	Do.
Genoa	$187\frac{1}{4}$	Lire		100	Do.
Leghorn	$43\tfrac{3}{4}$	Schill. Bco.	_	1	Pezza.
Lisbon	42	Do.	_	1000	Reis.
Leipzig	$147\frac{1}{4}$	Rix Dollars		300	Marks Bco.
Paris	$188\frac{1}{2}$	Francs		100	Do.
Prague	$146\frac{3}{4}$	Florins	_	200	Do.
Spain	47	Schill, Bco.	_	1	Ducat of Plate.
St. Petersbur	$g$ $9^1_2$	Do.		1	Ruble.
Vienna	$147\frac{3}{4}$	Florins		200	Marks Bco.

The Usance for Bills from England, France, and Holland, is 1 month's date.

The days of Grace are 12.

The Exchanges of Altona are the same as those of Hamburg.

#### EXAMPLE 1.

To exchange £ 550 10 0 into Banco at 13 6

We here multiply 550 Mks by the 13, and take parts out of the 550 for 6 Sch. then for the 10 s, we take the half of 13 Mks 6 Sch.

Instead of this we may reduce the 13 Mks 6 Sch. into Schillings, (making 214 Schillings,) multiply these by the number of the Pounds, take parts for the Shillings Sterling, and then divide the total by 16, to bring it into Marks.

#### EXAMPLE 2.

To exchange Bco Mks 4896 12 Sc. into Sterling at 13 10}

Mks Sc.	£	Mks Sc.					
If 13 10 ¹ / ₄	—— 1 ——	<b>4896 12 ?</b>					
218 Sc.		78348 Sc.					
873 Qrs.		313392 Qrs.					
£ 873)313392							
	£ 358	19 8 Sterling.					

#### Example 3.

To find the net produce of Mks 11363 9 Sc. at an Agio of 20 per Cent, and Rabat of 83 per Cent.

This Rabat is 83 per Cent calculated upon the Net Proceeds.

N.B. If the fluctuating Agio, which is generally about 23 per Cent, is used, we must work the Proportion; thus, for the above, at 23\frac{1}{4} per Cent we say,

	Mks	Mks		Mks	Sc.	•
If	$123\frac{1}{4}$	 $23^1_4$		11363	9	Curr.?
					93	
	493	93	_	<del></del> _		
			493 ) 1	.056811	5	
			_	2143	10	Agio.
			Mks.	9219	15	Banco.
				<del></del>		

#### EXERCISES.

### Exchange

- Ex. 1. £ 1000 Sterling into Banco at 14 0
  - 2. £ 534 15 0 into Banco at 13 11½
  - 3. € 372 13 6 into Banco at 13 13\frac{1}{3}
  - 4. Bco Mks 8765 4 into Sterling at 13 8
  - 5. Bco Mks 6000 0 into Sterling at 13 133
  - 6. Bco Mks 9257 11 into Sterling at 13 113

#### PRODUCTS.

Ex. 1.	Mks 14000 0	Ex. 4.	£ 649	5	6
2.	Mks 7336 2	5.	£ 432	18	5
3.	Mks 5153 6	6.	£ 671	1	1

# PRUSSIA.

#### BERLIN.

----

30 Silver Groschen = 1 Prussian Dollar.

-----

The Prussian Dollar used until lately to be divided into 24 Good Groschen.

The value of the Dollar is obtained from the Standard Rate of 14 Dollars being coined from 1 Cologne Mark weight of fine Silver, from which the value of the Dollar is 2 s 10\frac{3}{4} d Sterling, and the Par of exchange P. D. 6 27 S. G. per £ Sterling.

#### WEIGHTS AND MEASURES.

100	Pounds	=	103.11	lb Avoirdupois.
100	Quarts	=	25.20	Imperial Gallons.
100	Scheffels	_	151.21	Imperial Bushels.
100	Ells	==	72.93	English Yards.

#### COURSE OF EXCHANGE.

#### Berlin gives to

London	P. D.	6 243 Gr	. for	1	£ Sterling.
Amsterdam	_	143.3-10 ths	; —	250	Florins.
Augsburg [*]		$103\frac{1}{2}$		150	Florins, Convention.
Frankfort	_	103.	_	100	Rix Doll. W. Z.
Hamburg		152.2	-	300	Marks Banco.
Paris		81.2		300	Francs.
St. Petersbur	rg—	29.9		100	Rubles.
Vienna	_	103.4		150	Florins, effective.

N. B. The Money of Account, and the Weights and Measures throughout the Prussian dominions, are now uniformly regulated by the Berlin Standards.

To exchange £ 500 Sterling into Prussian Currency at P. D. 6 28½

D. Gr.
6 28½
100
695 0
5
P. Doll. 3475 0

### REVERSE.

To exchange P. Doll. 3475 0 at 6 28\frac{1}{2}

D. Gr.	£		D. (	ār.
If 6 28½	- 1		3475	9 ?
208 Gr.		•	104250	Gr.
417 ½ Gr.	£		208500	1 Gr.
417	) 20850	0		
	£ 50	0008	Sterling.	

## EXERCISES.

## Exchange

- Ex. 1. £ 1000 Sterling into Prussian Currency at 7 13
  - 2. £807 18 6 into Prussian Currency at 6  $21\frac{1}{2}$
  - 3. Pruss. D. 8000 into Sterling at 6  $27\frac{1}{2}$
  - 4. Pruss. D. 4382 16 into Sterling at 6 23

#### PRODUCTS.

Ex. 1. P. D. 7041 20 Ex. 3. £ 1156 12 6 2. P. D. 5426 17 4. £ 647 13 4

# RUSSIA.

#### ST. PETERSBURG.

100 Copecs = 1 Ruble.

There are in Russia two sorts of money, viz. a Paper or Bank Currency, and a Metallic Currency.

The value of the Metallic Ruble in Silver, is  $37\frac{1}{2}$  d Sterling; its rate of exchange against the Paper Ruble is variable, but at present it is about  $3\frac{3}{4}$  Paper Rubles for one Silver Ruble, making the value of 1 Paper Ruble about 10 d Sterling.

## WEIGHTS AND MEASURES.

Pounds	==	90.26	lb Avoirdupois.
Wedros	==	270.46	Imperial Gallons.
Tschetwerts	=	72.12	Imperial Quarters.
Arschines	==	77.77	English Yards.
	Wedros Tschetwerts	Wedros = Tschetwerts =	$\begin{array}{lll} \text{Wedros} & = & 270.46 \\ \text{Tschetwerts} & = & 72.12 \end{array}$

### COURSE OF EXCHANGE.

## St. Petersburg receives for 1 Bank Ruble, from

London	at 3 months	101 Pence Sterling.
Amsterdam	65 days	101 Stivers.
Hamburg	<b>—</b> 65 —	91 Schillings Banco.
Paris	<b></b> 70 <b></b>	1061 Cents.

The days of Grace are 10 for Bills after date, and 3 for Bills after sight.

The Old Style, or Julian Calendar, is still used throughout Russia. In comparison with the New Style it is 12 days later; thus the 10 th of April in Russia, corresponds with the 22 nd of April in England.

To exchange £ 818 14 4 Sterling into Rubles, Paper money, at 10 \( \text{d} \).

Rubles 18938 99 Co.

N. B. If we had to reduce these into Silver Rubles, we must divide by the exchange, as 3.72½; sometimes the rate in Sterling is given per Silver Ruble, as at 37 d per Silver Ruble.

#### REVERSE.

To exchange Rubles 18938 99 Co. into Sterling at 103

#### EXERCISES.

#### Exchange

- Ex. 1. £ 1000 Sterling into Paper Rubles at 101 d.
  - 2. £ 644 10 5 Sterling into Paper Rubles at 10½ d.
  - 3. Rubles 8000.00 into Sterling at 111 d.
  - 4. Rubles 7464.42 into Sterling at  $10\frac{1}{4}$  d.
  - 5. £ 1000 Sterling into Silver Rubles at 37½ d.
  - 6. £ 1000 Sterling into Silver Rubles at 10¼ d per Paper Ruble, and 372½ Paper Copecs per Silver Ruble.

#### PRODUCTS.

Ex. 1. Rub. 23414.63 Ex. 4. £ 318 15 10 2. Rub. 14731.90 5. S. Rub. 6442.95 3. £ 370 16 8 6. S. Rub. 6285.80

# FRANKFORT ON THE MAIN.

90 Kreuzers = 1 Rixdollar.

A Rixdollar* is 15 Florin. A Florin is 60 Kreuzers or 15 Batzen, the Batz being 4 Kreuzers. A Kreuzer is 4 Hellers.

There are two monies of account at Frankfort, viz. Reichs-geld or 24 Guldenfuss, and Wechselzahlung.

Reichsgeld is called 24 Guldenfuss, or Florin-foot, from the Cologne Mark weight of fine Silver being valued at 24 of these Florins.

Wechselzahlung, or Exchange-reckoning, is deduced from the estimation of the Carolin at 9 Florins 12 Kreuzers in Wechselzahlung, the value of the same being 11 Florins in 24 Guldenfuss; from which

46 Rixdollars W. Z. = 55 Rixdollars in 24 G. F.

Wechselzahlung is very nearly of the same value as Convention-Money, or money in 20 Guldenfuss, in which the fine Silver contained in 20 Florins is to weigh 1 Cologne Mark; the former is only 4-11 ths per Cent above the latter, the Carolin being valued at 9 Florins 10 Kreuzers in 20 Guldenfuss; therefore,

275 Rixdollars in 20 G. F. = 276 Rixdollars in W. Z.

The Sterling value of the Rixdollar in each of these valuations is, in

The value of the Batz in W. Z. is 1 penny 62-100 ths Sterling, and the Par of the Exchange on London 148.2 Batzen per ₤ Sterling.

^{*} It is to be noticed that a Reichsthaler, or Rixdollar, is a Dollar of account, and that it is 3-4 ths of a Species-dollar, or a Dollar in Coin. The latter is 2 Florins.

#### WEIGHTS AND MEASURES.

100 lb heavy weight	=	111.42 lb Avoirdupois.
100 lb light weight	==	103.16 Do.
100 Malters	==	39.45 Imperial Quarters.
100 Viertels	=	157.83 Imperial Gallons.
100 Ells	==	59.85 English Yards.

#### COURSE OF EXCHANGE.

## Frankfort gives, in Wechselzahlung, to

		3			6,
London	$150\frac{3}{4}$	Batzen	for	1	& Sterling.
Amsterdam	$139\frac{1}{2}$	Rixdollars		250	Florins.
Augsburg	1001			150	Florins.
Bremen	$110\frac{1}{2}$			100	Rixdollars.
Hamburg	146			£00	Marks Banco.
Paris	<b>7</b> 8∄			300	Francs
		in 24 Guld	enfus	s, to	
Berlin	1031	Kreuzers		1	Prussian Dollar.

The Rate with Augsburg is similar to that with Vienna; and the Rate with Berlin to that with Breslau.

The Usance of Bills, not payable at the Fairs of this place, is 14 days' sight.

The days of Grace are four.

N. B. In the exchange between Paris and Frankfort, Pars of Exchange are established in monies of the two places, and the rate at Paris is varied by a per Centage.—These Pars are

640 Francs = 297 Florins in 24 G. F. 400 Francs =  $103\frac{1}{2}$  Rixdollars W. Z.

#### EXAMPLE 1.

To exchange £ 500 Sterling into Frankfort money in 24 Guldenfuss at 1503

Batz. 1503 = 603 Kreuzers.
500

90 ) 301500

Rixdollars 3350 0 in W. Z.
55

46 ) 184250

Rixdollars 4005 39 in Reichsgeld.

### EXAMPLE 2.

To exchange R. D. 3350 W. Z. into Sterling at 1503

B. £ R. D. Kr. 
$$150\frac{3}{4}$$
 — 1 — 3350 0?  $\frac{\cancel{\xi}}{603}$  Kr.  $\frac{\cancel{\xi}}{603 \ )301500}$   $\frac{\cancel{\xi}}{\cancel{\xi}}$  500 0 0 Sterling.

### EXERCISES.

- Ex. 1. £ 1000 into Frankfort W. Z. at 151\frac{1}{4}
  - 2. £814 14 6 into W. Z. at 1503
  - 3. £ 1000 into Reichsgeld at Frankfort at 152
  - 4. Rixd. 4000 W. Z. into Sterling at 151
  - 5. Rixd. 4406 44 W. Z. into Sterling at 150\frac{1}{2}
  - 6. Rixd. 8000 in 24 G. F. into Sterling at 151

#### PRODUCTS.

Ex. 1.	Rixd. W. Z. 6722 20	Ex. 4.	£ 596	0 6
2.	R. D. W. Z. 5458 59	5.	£ 658	15 7
3.	R. D. 24 G. F. 8077 27	6.	£ 996	19

# AUSTRIA.

#### VIENNA AND TRIESTE.

60 Kreuzers = 1 Florin.

A Rixdollar is 1½ Florins or 90 Kreuzers; it is a nominal money used in exchanges, but not in accounts.

The value of the money of account is that called Convention, or 20 Guldenfuss, in which, as before remarked, the Cologne Mark weight of fine Silver is supposed to be coined into 20 Florins.

The value in Sterling of the Florin at this rate, is  $2 ext{ s } 0_{10}^{4} ext{ d}$ , from which the Par of exchange with London is 9 Fl. 50 Kr. per £ Sterling.

'The Currency of Austria is of both Paper and Metal. The Paper money, called Wiener-Wahrung, or Vienna-Value, is at a fixed Discount of 60 per Cent; by which 100 Florins in Cash are equal to 250 Florins in W. W.

Bills upon Vienna are generally directed to be paid in effective,* that is, in Cash, to guard against their being paid in Paper money of the depreciated Value.

#### WEIGHTS AND MEASURES.

100 Pfund or Pounds	=	123.52 lb Avoirdupois.
100 Eimers	=	1245.78 Imperial Gallons.
100 Metzen	=	21.15 Imperial Quarters.
100 Ells	=	85.21 English Yards.

^{*} Very frequently the particular money in which the Bills are to be paid is specified; as in 20 Kreuzer Pieces.

## COURSE OF EXCHANGE.

# Vienna, in effective, gives to or receives from

London	10	3	Flor. and Kr.	for	1	£ Sterling.
Ámsterdam	13	381	Rixdollars	_	<b>250</b>	Florins.
Augsburg	1	001	Florins		100	Flor. Augs. Curr.
Constantinop	le 2	10	Paras		1	Florin.
Frankfort	1	$00\frac{1}{2}$	Florins W. Z.		100	Flor. in 20 Kreuz.
Genoa	1	$18\frac{3}{4}$	Florins		300	Lire Nuove.
Hamburg	1	45	Florins		200	Marks.
Leghorn		5 <b>7</b> 1	Soldi	_	1	Florin.
Milan	1	001	Florins	_	300	Lire Austriache.
Naples	•	$58\frac{1}{2}$	Grani		1	Florin.
Paris	1	181	Florins		300	Francs.

# The Usance of Bills is 14 days.

The days of Grace are 3, reckoned as in England, Bills not being presented for payment until the third day after that on which the regular time expires.

## Trieste gives to

London	9 59	Flor. and	Kr. for	1	£ Sterling.
Amsterdam	$49_{\underline{9}}^{1}$	Kreuzers		1	Florin.
Genoa	$23\tfrac{1}{2}$	Do.		1	Lira Nuova.
Hamburg	$43\tfrac{1}{4}$	Do.	***	1	Mark Banco.
Leghorn	2	Florins		1	Pezza.
Lisbon	1 55	Flor, and	Kr. —	1	Milreis.
Messina	4 51	Do.		1	Onza.
Milan	$98\frac{3}{4}$ —	Florins	_	300	Lire Austriache.
Naples	1 36	Flor, and	K1. —	1	Ducat.
Paris	$23\tfrac{1}{2}$	Kreuzers		1	Franc.
Smyrna	16 —	Florins		100	Piastres.

To exchange £ 456 17 8 Sterling into Florins at 10 1

The decimal .447 of a Florin is valued in Kreuzers by multiplying it by 60.

## REVERSE.

To exchange Florins 4576 27 into Sterling at 10 1

Fl. Kr. £ Fl. Kr.

If 10 1 — 1 — 4576 27?

601 Kr. 274587 Kr.
£ 456 17 8 Sterling.

#### Exercises.

- Ex. 1. £ 1000 Sterling into Florins at 9  $57\frac{1}{2}$ 
  - 2. £ 216 12 6 into Florins at 10 2
  - 3. Flor. 4484 20 into Sterling at 10 1
  - 4. Flor. 5000 0 into Sterling at 10  $1\frac{1}{4}$

#### PRODUCTS.

Ex. 1. Flor. 9958 20 Kr. Ex. 3. £ 447 13 9

2. Flor. 2173 28 Kr. 4. £ 498 19 2

# LOMBARDO-VENETO.

----

#### VENICE AND MILAN.

100 Centisimi

= 1 Lira Austriacha.

The Lira is also divided into 20 Soldi Austriachi.

The Lira is the same value as the 20 Kreuzer Piece, or 1-3 rd of an Austrian Florin. The Piece of 3 Lire is of the same value as a Florin, and the Piece of 6 Lire as a Species-dollar.

The value of the Lira in Sterling is  $8\frac{1}{100}$  d Sterling, from which the Par of exchange is Lire 29.52 Cent. per £ Sterling, or  $48\frac{3}{4}$  d Sterling for 6 Lire.

#### WEIGHTS AND MEASURES.

100 lb Grosso	=	105.27 lb Avoirdupois.
100 lb Sottile	=	66.58 lb Avoirdupois.
100 Secchi	==	237.71 Imperial Gallons.
100 Staji	=	27.62 Imperial Quarters.
100 Ells, Silk Measure	=	69.30 English Yards.
100 Ells, Woollen Meas.	=	74.27 English Yards.

## COURSE OF EXCHANGE.

## Venice gives to or receives from

London Amsterdam	$47rac{1}{2}$	Pence Sterling Grotes	for	6 6	Lire Austriache. Do.
Augsburg	$59_{4}^{ ilde{1}}$	Soldi Austr.	_	1	Florin.
Genoa Hamburg	$86\frac{3}{4}$	Grotes Bco		G	Lira Austriacha. Do.
<i>Lisbon</i> Leghorn	$\begin{array}{c} 49\\ 97\frac{1}{2} \end{array}$	Soldi Austr. Soldi di Cambio			Reis. Lire Austriache.
Naples	$59 ilde{ ilde{3}}$	Grani	_	3	Do.
Paris	$86\frac{1}{2}$	Cents		1	Do.
Vienna	$60^{5}_{1}$	Kreuzers		3	Do.

The late money was in Lire Italiane of the same value as the French Franc. 87 Lire Italiane are reckoned worth 100 Lire Austriache.

To exchange £ 464 10 Sterling into Lire Austriache at 30 Li. 15 Cent. per £ Sterling, and at  $47\frac{3}{4}$  d Sterling for 6 Lire Austriache.

It is to be observed, that the first of these Rates is rather the Milan Rate, than either the Venice or the London Rate.

Lire Aust. 14007 95 Cent. 2 nd Product.

For the Course of Exchange of Milan see Page 60.

#### EXERCISES.

Ex. 1. £ 500 Sterling into Lire Aust. at 30 Lire.

- 2. £ 500 Sterling into Lire Aust. at 48 d.
- 3. £ 129 16 5 into Lire Aust. at  $47\frac{1}{4}$  d.
- 4. Lire Aust. 8000 into Sterling at L. 30,30
- 5. Lire Aust. 6424 60 into Sterling at 481 d.
- 6. Lire Aust. 4578 92 into Sterling at 473 d.

### PRODUCTS.

*********

Ex. 1.	L. A. 15000.00	Ex. 4.	£ 264	0 6
2.	L. A. 15000.00	5.	£ 215	5 4
3.	L. A. 3956.44	6.	£ 151	16 9

# NAPLES.

100 Grani = 1 Ducat.

The Ducat is also divided into 5 Tari, or 10 Carlini.

The Neapolitan Ducat, which is of Silver, is called del Regno; its value is 3 s 3¾ d Sterling, making the Par of the Exchange of Naples upon London 603¾ Grani per £ Sterling.

## WEIGHTS AND MEASURES.

The Cantaro Grosso of			
100 Rottoli	=	196.42	lb Avoirdupois.
The Cantaro Piccolo of			
150 Libbra of 12 Oz.	=	106.07	Do.
The Barile of Wine	=	9.11	Imperial Gallons.
The Tomolo of Wheat	=	1.41	Imperial Bushels.
A Canna	=	83.18	English Inches.

## COURSE OF EXCHANGE.

# Naples gives to

London	607.	Grani	for 1	£ Sterling.
Amsterdam	50.20		- 1	Florin,
Genoa	23.80		<b></b> 1	Lira Nuova.
Hamburg	44.15		_ 1	Mark Banco.
Leghorn	122.75		<b> 1</b>	Dollar of 8 Reals.
Lisbon	51.		<del></del> 1	Crusado.
Madrid	88.	_	<b></b> 1	Dollar of Plate.
Palermo	119.	<del></del>	<b>— 1</b>	Scudo of 12 Tari.
Paris	23.75		1	Franc.
Vienna	60.		- 1	Florin.
Venice	20.10		- 1	Lira Austriacha.

The Usauce for Bills is 30 days' sight.

To exchange £ 500 Sterling into Ducats at the rates of  $30\frac{1}{2}$  d per Ducat, and of 607 Grani per £ Sterling.

d	Duc.	`	£	
If 39½	 1	<del></del>	500 ?	
		_	<del></del>	
79		2	40000 Half	pence.

Duc.

79)240000

Ducati 3037.97 Grani, 1 st Product,

And

Gr.

607

500

Ducati 3035.00 2 nd Product.

### Exercises.

## Exchange

- Ex. 1. £ 1000 Sterling into Ducats at 383 d.
  - 2. £ 818 12 2 into Ducats at 40\frac{1}{3} d.
  - 3. £651 16 6 into Ducats at 605 Gr.
  - 4. Ducats 4000 into Sterling at 39\frac{3}{4} d.
  - 5. Ducats 3050.50 into Sterling at  $39\frac{1}{2}$  d.
  - 6. Ducats 8895.36 into Sterling at 612 Gr.

#### PRODUCTS.

**~~~~~~~~** 

Ex.	1.	Ducats 6193.54	Ex. 4.	£	662 10	0
	•	D 4. 4001 14	<u></u>	C	E 00 1	6

Ducats 4881.14
 Ducats 3943.54
 £ 502
 £ 1453
 10