

tion chiefly. Wax and India-rubber might be exported in large quantities, but the natives are everywhere wanting in that enterprise which would lead Europeans at once to prepare these valuable products from the raw material. Takaunga, however, is quite taking the place of Mombasa as a grain port. It is situated about thirty miles to the north, and if information received can be relied upon, this place is rapidly rising to importance, and is likely to become one of the future granaries of East Africa.

At Malinda, a town of about 5,000 inhabitants, the bulk of the trade is in millet (*holcus*), and sesamum (oil-seed). As many as thirty large dhows leave during September and October, laden with the former, principally for Makulla, and in February, March, and April, from fifteen to twenty are loaded with the latter. The millet harvest is over early in September; the sesamum gets ripe early in November, and is finished gathering towards the end of the year. The plantations extend for about twelve miles inland, and nothing but the fear of the Galla and Wasania tribes that surround them prevents the cultivation from extending as far as at Takaunga. The soil is extremely fertile, without being either heavy or damp. Bush-land, after being roughly reclaimed by burning, produces heavy crops for five consecutive years without any kind of dressing; the sowing, however, is carefully performed, and weeds are kept under. Insects are not troublesome, but enormous flocks of small birds are the pests of the farmer, and were the only things greatly complained of when conversing with proprietors of land. The sesamum seed, which is all of the black variety, grows as cleanly as the grain, and one may walk for miles through fields closely and regularly planted, without being able to notice a spot of blight, or a patch destroyed by insects. The millet is shipped off at once for Makulla and Zanzibar, but the sesamum is mostly stored till the beginning of the south-west monsoon, when it is shipped to Arabia, but part is sent to Zanzibar during the north-east monsoon.

Lamo is another town of about 6,000 inhabitants, situated 2½ miles from the entrance of what is believed might be made a very fine harbour for steamers. The principal exports are ivory, hides, millet, orchilla, sesamum, rafters, and cattle. Most of this produce finds its way to Zanzibar, through the hands of the Indians. Orchilla weed is procured from the numerous damp creeks in the locality, many of them running ten to fifteen miles inland. The Indians, and even European merchants at Zanzibar, contract with the owners of 'Mtepes, who send crews to gather cargoes of this lichen, receiving an advance in signing the contract; but this trade is rapidly falling off, in consequence of the low prices at present obtaining for the dye in Europe. Zanzibar rafters are generally in demand, and are usually contracted for in a similar manner. 'Mtepes are the only vessels suitable for carrying such a cargo. Abundance of bees-wax, and doubtless other products, might be brought down from the interior; but its present state is entirely unfavourable to commercial enterprise. Mauda Bay, at the north end of Lamo Channel, is nearly land-locked, but has a good entrance, and a stretch of deep water close to Mauda Island, which forms a safe anchorage for the largest vessels. The north shore of this bay is formed by the southern coast of a large island, which contains the towns of Patte, Siwy, Paza, Zingatini, and Tundua. The former is interesting only in an archaeological point of view, still containing the ruins, within well-preserved walls, of a town of about 100,000 inhabitants, but at present having only a population of about 100 souls. The soil of the island is extremely light and friable; though not generally sandy, it has everywhere a substratum of porous limestone rock, probably of coralline formation. Though not suitable for cereals, it seems all that could be desired for tropical fruits and vegetables; and though skilful cultivation has only been carried on for a few years, the effects have surprised the natives. The great drawback

at first was want of water, but a good supply is now readily obtained by sinking wells about twelve feet into the rock. They have begun to import camels, by which means the regular system of irrigation, similar to that employed at Muskat, is already commenced. Oxen are not found strong enough here for this work. The products now successfully cultivated are tobacco, tambun, cocoa-nuts, bananas, and dates, besides water-melons, and nearly every kind of tropical fruit. Tobacco is largely exported to the towns on the coast, and is of a fine quality and flavour: it is likely to become a staple export. Tambun (pan), a leaf much used in conjunction with betel-nut by all natives and Indians, grows more readily than in any part of the Sultan's dominions. There are large gardens of it, and during the north-east monsoon it is even sent as far as Zanzibar, where it is found difficult to rear. Cocoa-nuts grow in profusion, and are principally used to brew the native beer (tembo), which from Lamo to Tula is generally used as a beverage, even by strict Moslems. Bananas are largely grown, and form almost as general an article of diet as millet, in fact supplying the place of manioc (cassava), which is but little cultivated at this spot. The luxuriant growth of the date palm is the most notable feature connected with agriculture in this district. The date has been tried throughout the Zanzibar dominions, and has rarely been found to fruit. At Siwy, however, this palm seems to prosper as completely as in the Persian Gulf. Large herds of cattle and flocks of sheep are reared; the latter are very fine specimens of the Somali breed, and are largely exported, as is also Sumli, or ghee, which is preferred by the Hindoos on the coast, who use it with all their food, to that from any other district. The towns of Tundua and Zingatini on the eastern and north-eastern sides of the island are small, and the inhabitants devote themselves almost entirely to the breeding of cattle, sheep, and goats.

In this, his first report, Vice-Consul Holmwood states that his object has been to give a general sketch of commerce and agriculture on this coast, hitherto so little visited. He has, however, carefully prepared the way for obtaining, in future years, reliable statistics, having spared no pains in impressing upon Customs' masters, and other influential British subjects, the responsibility incurred in giving other than accurate information to British consular officers visiting their districts, which advice has generally been received as appropriate.

CORRESPONDENCE.

TRADE OF TRIESTE.

In your *Journal*, of September 29, 1876, I read an able *critique* on the "Trade of Trieste," by Mr. Thomas A. Weldon, who is, I am told, one of a large City firm of accountants, and whose remarks are therefore valuable. I see that he has confined his notice to the first paper of my paper (Sept. 15); and, as the whole may some day be re-published, I hope he will kindly review the conclusion, in your number of September 22.

Mr. Weldon is quite justified in pronouncing the mistakes to be "of a very serious character." Curious to say, the misprints, for such they are, escaped the author's notice in the two German and the two Italian editions of his work. I have been delayed in procuring the necessary corrections, and have only just received from Mr. Superintending Engineer Franz Rziha an answer to my inquiries. He writes to me from Vienna (III., Reinerstrasse, 49), as follows:—

"You must not forget that my work was written in 1872, and that its statistical tables were those of the decennial period 1860-1870; moreover, that the object

of the paper was rather to prove the national and imperial importance of the Port of Trieste than to serve for statistical data. Since those years the figures have considerably changed, and Trieste has lost much ground, especially in the grain trade, which is now in the hands of Russia and America. I have printed the latest information in a technical study on the Saint Gotthard Railway (Die Bedeutung der St. Gotthardbahn. Vortrag gehalten am 27 April, 1875, in der K. K. Geographischen Gesellschaft zu Wien. Carl Finsterbeck in Wien).

"I send you the following corrections of errors which escaped my notice, &c."

"As regards the table of cereals (Journal p. 936, line 9), for 'the late years' read 1870; and for millions of centners' read millions of francs. Correct also the figures as follows:—

Chile not	5 million francs but	50
Zollverein .. "	5	" " 50
England .. "	80	" " 800
France .. "	340	" " 140
Switzerland .. "	4	" " 140
Netherlands .. "	57	" " 87
Italy "	58	" " 28."

With respect to wine, the figures are taken from Kolb, but they shall be verified by reference. Southern Austria, Hungary, Dalmatia, and the Adriatic Archipelago, are mostly wine-growing countries, and many of the islands supply hardly anything but wine. As Mr. Weldon justly remarks, the statement that "the produce of Austria more than doubles that of Spain and Germany taken together," deserves to be prominently brought out.

Regarding silk (p. 936, line 17), a remarkable *lapsus calami* has crept in. While coal, iron, cotton, and wool are valued by centners, silk should be corrected to pfunds (or Austrian lbs. = 1.2 avoird). It may interest you to know that political events are greatly influencing the silk trade of Trieste, and the following figures, kindly supplied by M. A. Cuzzi, a silk merchant of this port, may be relied upon.

Greggie (Raw Silks).

	Numbers.	Italian lire (francs).	per kilometre.
Italiani classiche	10—12;	120	"
Buone correnti ..	10—13;	115	"
Do. ..	11—13;	114	"
Do. ..	11—14;	112	"

Trame Nostrane (Country Trams).

	Nos.	Italian lire (francs).	per kilogramme.
Buone correnti ..	22—26;	117	"
Do. ..	24—28;	114	"
Do. ..	24—30;	113	"
Do. ..	26—30;	113	"
Do. ..	30—33;	107	"
Do. ..	30—44;	105	"

A tre Cape (Thrown silk of three singles).

	Nos.	Italian lire (francs).	per kilogramme.
Belle correnti....	30—34;	129	"
Similar.....	34—38;	124	"
Seconds.....	30—34;	121	"
Do.	34—38;	118	"

Organzine Strafilati (Organzines of more than three singles.)

	Nos.	Italian lire (francs).	per kilogramme.
Classici	18—12;	136	"
Sublimi	do. :	132	"
Buoni correnti ..	18—22;	129	"
Sublimi	20—26;	126	"
Do.	22—26;	123	"
Do.	24—28;	121	"

"Credit" in German, really signifies the medium of circulation in general.

The *Depositen* deposits are thus given by Dr. H. Neumann for the year 1871:—

Bank of England	213.3	millions of florins.
Prussian Banks	112.7	"
Russian Reichsbank....	?	"
Bank of France.....	12.6	"
Austrian National Bank	?	"
Italian ..	19.9	"
Belgian ..	55.2	"
American National Banks	1,243.4	"

Total..... 1,771.1 or 1,771,100.000

This total refers only to the establishments here noticed; and the figures were derived from a trustworthy source.

Mr. Weldon doubts the utility of inserting the sketch of ancient trade-routes, which considerations of space have rendered so imperfect. Evidently, Mr. Rziha's object was to trace the gradual obliteration of great central emporia into the main zones of universal commerce, and this, I venture to opine, is ably done. The line along the Mesopotamian streams is drawn, not to the Gulf of Persia, but to the Indus. Mr. Weldon would certainly not ignore the connection of the great Indine valley, whose ship traffic and transit, opened by the Macedonian invader, was so well known in the days of the earliest Caliphs, when traders from Ceylon, Broach, and the other chief ports of Western India, coasted along the shores of Sind, *en route* to the Euphrates. Marseilles is mentioned, whilst Rhodes and Corinth are disregarded, because the former was the chief land-terminus of the North Mediterranean trade, and the two latter were mere intermediate stations. The line through the wastes east of Syria to the Levant, of course connected India and China with the Mediterranean. And in one point I must join issue with Mr. Weldon. The "utility of showing ancient trade-routes" cannot be called "trifling," when, since 1840, we, travellers and geographers, have been striving our best to restore the "first overland" by a Euphrates Valley Railway. Our failure in this matter is the more regrettable at the present moment, when a Russian invasion of Turkey, through the comparatively defenceless lines of Asia Minor, connecting the Caucasus and the Hellespont, is generally discussed. A Euphrates Valley Railway would not only have consolidated the Eastern possessions of the Porte, it would also have served as an admirable base line for military operations. No other nation but ourselves would have disregarded and despised a work so necessary to the safety of British India; and the intrigues, Russian and Turkish, which opposed its inception, should have been additional inducements to push the project through. Perhaps it is not too late, even now, to agitate in this matter. Mr. Andrew will take note.

I quite agree with Mr. Weldon that the author should have indicated "what routes came under the titles of South Germany, Saxony, &c." But Mr. Rziha informs me that he has supplied the deficiency in the first part of his latest work on the "Official Communications of Railways" (Officiellen Ausstellungsbericht über Eisenbahn—Ober und Unterbau Wien, 1876; to be in three parts). On page 176 he has discussed the Arlberg Railway, and, further on, the latest project of M. de Lesseps for connecting Samarkand and Peshawar, *via* the Hindu-Kush.

Again requesting you to excuse this long delay,—I am, &c., R. H. BURTON.
Trieste, Nov. 21, 1876.

LIFEBOATS.

I regret that I was unable to attend the meeting last Wednesday, when the Rev. E. L. Berthon, M.A., read his paper on "Collapsible Boats."

I recollect seeing, at the "Collection of Inventions