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# he Italo-Turkish War



TRANSLATID BY

FOST LIEUTENANT RÉNATO TITTONI, U. S. M. C.



John Julian Juli

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The Oasis of Tagiura.

Italy, Emilian, Emili

# The Italo-Turkish War

(1911-12.)

Translated and Compiled from the Reports of the Italian General Staff

BY

FIRST LIEUT. RENATO TITTONI, U. S. M. C.

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#### Notes.

Sapper—A soldier employed in building fortifications. Class of 1889, 1890, etc.—The males are called to colors when twenty years of age, and are classified according to the year they were born.

Ascari and Meharisti—Native troops from Italy's African possessions.

Spotters—Officers detailed to watch the fall of the shots around the target and report the results in order to keep in range.

### CONTENTS.

Preface,				9
The Mobilization,				ΙI
Military Operations				2 I
The First Occupations,				25
The First Occupations,	Meli	ina,		26
Occupation of Tobruk, Derna, Bengasi, and H	oms	S		29
Establishment of Bases.				30
Zone of Tripoli,				30
Zone of Tripoli,				30
Combat and Occupation of Ain Zara,				33
Reconnaissance,				
Battle and Occupation of Gargaresc,				37
Second Combat at Ain Zara.				28
Zone of Homs,				38
Reconnaissance of Lebda.				38
Combat and Occupation of Mergheb.			•	30
Night Combat of Mergheb,				30
Zone of Bengasi			•	40
Zone of Bengasi,	•	•	•	40
Defense of Bengasi,	•	•		43
Defense of Bengasi,	•	•		43
Zone of Derna,	•	•		48
Defense of the Redoubts of Lombardia and Cala	ahri			51
Intensification of the War in Libya and the Ægean,	4011			52
Zone of Zuara	•	•		
Zone of Zuara,	•	•		52
Operations for the Occupation of Sidi Said,	•	•		52
Battle of Sidi Ali,	•	•		55
Occupation of Zugra	•	•		57
Occupation of Zuara,	•			58
Operations in the Ægeen	•	•		61
Operations in the Ægean,	•	•	٠	62
Expedition to Rhodes,		•	٠	62
Landing at Kalitheas and the Battle of Asguru	١,	•		
Battle of Psitos,				65

## CONTENTS—Continued.

Zone of Homs,						67
Battle and Occupation of Lebd	la,					67
Battle of the Monticelli di Leb	da,					67
Zone of Misurata,						71
Battle and Occupation of Misu	rata,					7 I
Battle of Gheran,						72
Zone of Derna,						72
Advance on Sidi Abdallah II.,						72
Battle of Kasr Ras el Leben, . Battles of Sidi Abdallah III. ar						75
Battles of Sidi Abdallah III. ar	nd Bra	aksa	da,	, .		76
Zone of Tripoli,						77
Zone of Tripoli,	anzur,					77
Battle of Sidi Bilal,						78
Zone of Tobruk,						81
Table of Losses in the Principal Act	tions,					82
The Various Arms,						85
The Artillery,						93
Engineer Corps,						94
Sanitary Service,						103
Commissary Department,						101
Transportation,						107
Veterinary Service,						109
Postal Service,						110
Postal Service,	olicy,					113
Landing-places,						114
Survey,						114
Roads, Streets, and Railways,						117
Telegraph and Telephone,						121
Water Mains,						122
Sanitary and Hygienic Measures, .						123
Various Services,						127
Conclusion,						131



TRIPOLI.—Italian Flag Raised on the Castle, October 5, 1911.



#### PREFACE.

The various correspondents of Italian newspapers have narrated from time to time, while under the immediate impression of facts, the singular events of our recent war, with patriotic zeal and brilliant and colored style. They have also referred to the civil administration and the policy pursued in Libya and the Ægean by the Army and Navy; also, with less detail, on account of the lack of data and newspaper conservatism, on the operation of the mobilization, the complicated work of rendering secure the bases and constantly maintaining the troops at a high standard of efficiency.

Therefore, in order to get a clear and complete account of the war, it seemed wiser to compile a brief report of all the actions of the troops and to treat successively the mobilization, military operations, and civil administration and its policy, which the military authorities could execute with the cordial and efficacious coöperation of the civil personnel, called into the colonies after the first months of the war.

This publication is, therefore, a summary of the official actions during the Italo-Turkish War.

#### ANNOUNCEMENT.

The publishers desire to express their great appreciation of the courtesy of the Italian Government, in permitting the use in this volume of the illustrations as published in the original report to their Government.

#### CHAPTER I.

#### THE MOBILIZATION.

The Tripolitan Question had been agitated a long time in Italy, but public opinion became largely interested only after the commencement of the Young Turkish régime, which started to interfere with and continually placed obstacles to the pacific development of commerce, industries, and anything else of Italian initiative, not only in Tripoli and Cyrenaica, but, it may be said, in every other locality of the Turkish Empire.

A rapid survey of the Moroccan Question, for the purpose of arriving at a definite solution, showed that the importance of our status in the Mediterranean was lessened, and that to insure the rights of Italy in Tripoli we had to have a sphere of influence and pursue a policy adequate to our maritime interests.

Our Government made demands of the Porte, and, awaiting a reply, resolved to prepare a military expedition, in order to show Turkey the firm intention of Italy not to see her prestige as a great power diminished and to insure the recognition of her rights by the other nations.

The special mobilization which followed was the first experience of this kind for our troops on an extensive scale since the campaign for the union of Italy. In the patient work of organization and preparation, the military authorities had to keep in mind, aside from the particular exigency requiring this expedition, the necessity of not interfering with an eventual general mobilization of the troops, following that of each special body. In line with the above condition, it was proposed to assemble an expeditionary corps consisting of all arms (Infantry, Cavalry, Artillery, Hospital, and Subsistence Corps), drafts from the various territorial troops, and to detail for service the Second Reserve. There had to be obtained special matériel and various means for light transportation, which had to be substituted for regulation matériel and regular transportation facilities, with the exception of the carriages and caissons of the Field Artillery.

To diminish the work of the Sanitary Corps, part of the Red Cross Association was assigned to the regular troops to maintain ambulances and field hospitals.

It was decided that, as soon as the special mobilization was completed, the Staff should replace immediately the personnel and matériel taken from the forces available for a general mobilization.

The Expeditionary Force consisted of the following: 2 divisions (1st and 2d), each consisting of 2 brigades and each brigade of 2 regiments, with Machine Gun platoons; 2 squadrons of Cavalry; 1 regiment of Field Artillery, consisting of 4 batteries of 75-A (3-in.); 1 company of sappers; wagon and pack transportation.

Supplementary Troops: 2 regiments of Bersagliere (Infantry), with Machine Gun platoon; 1 regiment of Field Artilley (4 batteries); 2 companies of Coast Ar-

tillery; 2 companies of sappers; 1 company of Signal Corps; 4 field radio stations; wagon and pack transportation; Red Cross Association. The Second Reserve was held in readiness.

Total Expeditionary Force: 34,000 men, 6,300 horses and mules, 1,050 wagons, 48 field guns, 24 mountain guns.

Difficulties consistent with the work of a special mobilization were experienced; some were foreseen, others resulted from the peculiar conditions of the moment, namely:

The fact that the Class of 1889 was discharged a few days previously.

The special sanitary regulations of the kingdom, preventing the recall to arms of all those diseased.

The necessity of effecting the embarkation of the troops without interfering with the normal traffic of the ports, especially that of Naples, selected as the principal port of departure.

The necessity of obtaining proper transportation without interfering with the national maritime traffic.

The difficulty of equipping all the expeditionary force with the olive-drab uniform, when said uniform had not as yet been adopted by all the arms.

As has been noted, Turkey evaded answering the demands made by our Government, paid no attention to the remonstrances made by us against the sending of her troops and war matériel to Tripoli, and finally made an evasive reply to our ultimatum.

On September 25, 1911, an order was issued desig-

nating September 28, 1911, as the day of mobilization. The Expeditionary Force consisted of the Class of 1890 and those recalled from the Class of 1888.

The transports were turned over to the Navy as rapidly as possible, and matériel was freighted with all celerity to the point of embarkation. Daily requests were made by officers to be allowed to go to the front, and many soldiers of the Class of 1888 made similar requests. Many demands were made by ecclesiastics and different religious orders to be allowed to accompany the Hospital Corps. A convenient number of all were assigned.

As soon as the mobilization was commenced, the military authorities ordered that all interested headquarters immediately compile and forward reports relative to the movements and dispositions of the troops, so that this valuable data could be used as a guide for such future organization or for the general mobilization.

Said reports, as well as public opinion at home and abroad, have shown that the dispositions made more than fulfilled expectations. It was due to the zeal and interest displayed by all concerned that the mobilization was rapid and complete.

But the new conditions arising from Turkish concentration in Libya demanded the sending of a force much superior to the one contemplated, and, profiting by the experience gained, orders were issued in a brief time for the new mobilization. So from the middle of October to the end of December the following troops were mobilized:

2 commands of Divisions (3d and 4th);

- 7 brigades of Infantry (5th to 11th) and 1 regiment (30th);
- 6 battalions of Alpines (Infantry);
- regiment of Bersagliere (Infantry);
- 8 squadrons of Cavalry;
- 6 batteries of Field Artillery (mod. 1906);
- 11 batteries of Field Artillery (75-A, 3-in.);
  - 8 mountain batteries;
- 7 companies of Coast Artillery, for service with 5 batteries of cannon No. 149 (6-in.), 1 of shell No. 149 (6-in.), and 1 of mortar No. 210 (8-in.);
- 5 companies of sappers;
- 4 mine companies;
- I company of telegraphers;
- r section of aërostatics, aëroplanes, balloons, etc.;
- 2 radio-telegraph stations and search-lights, divisional purposes (3d and 4th);
- 2 field hospitals of 50 beds each;
- 4 field hospitals of 100 beds each;
- 2 mountain ambulances (Red Cross);
- I section of bake ovens (mod. 1897), and various supplies for garrison purposes.

With this mobilization accomplished and in addition to the first expedition we now have: 55,000 men, 8,300 quadrupeds, 1,500 wagons, 84 field guns, 42 mountain guns, and 28 siege guns.

From January to October, 1912, there were organized, as exigencies required in the localities of Libya and the Ægean, 4 battalions of Alpines (Infantry), 7 battalions

of Ascari (Colonial), and I squadron of Meharisti (native Colonial) mounted on camels; various dirigibles and aëroplanes were sent and gave proof of their value, which was rapidly developed.

Simultaneously with the sending of subsistence and equipment came the necessity of filling the vacancies caused by losses through battle and illness, and the providing of substitutes for those recalled from the Class of 1888 and discharged in April and May (30,000 men) and those of the Class of 1889 discharged in the months of July and August (36,890 men).

The rapidity of the movements of troops and matériel by rail was truly remarkable. It is enough to state that from September, 1911, to June 30, 1912, as taken from the report of the Administrator of Railways for the year 1911-12, there were transported for the war in Libya: 2,940 officers, 184,290 men, 10,650 quadrupeds, and 585 wagons. The transportation of ammunition and aëronautic material was ingeniously effected. The principal part of this work occurred in the months of October and November, 1911, when transportation had to be furnished simultaneously for those discharged at Naples and Palermo, of the Class of 1889, and those called to arms, of the Class of 1891. This meant the transportation of about 250,000 men, and it may be added that this extraordinary movement of troops by rail was so well handled that it did not in the least affect the public service.

The excellent results obtained in this mobilization, without any preparation prior to the declaration of war,



TRIPOLI.—Krupp Gun "Fort Faro," Abandoned in Consequence of the Bombardment by the Fleet.



TRIPOLI.—Krupp Gun Dismounted by Fire from the Fleet.



TRIPOLI.—Battery after Bombardment by the Fleet.



The Harbor at Tobruk.

has demonstrated that even the urgent disposition of troops can be accomplished completely and with promptness in the face of all difficulties, because of well-thoughtout rules and instructions, and because the headquarters of the mobilization were well prepared to meet the work as it occurred.

The result has proved that, although it is desirable to accomplish work of this nature on the base of set rules and instructions, the good-will, interest, and intelligent zeal that was displayed are also required, and that with this alone seemingly insurmountable obstacles, arising from unexpected orders, can be overcome.

The hearty coöperation of the Navy, the railways, and the post and telegraph offices contributed greatly to the success of this mobilization.



#### CHAPTER II.

#### MILITARY OPERATIONS.

As has been shown, in September, 1911, the Secretary of War prepared for military action in Libya in case the situation could not be arranged diplomatically with Turkey.

The Secretary of the Navy in the meantime assembled the fleet and made preparations to transport the troops, ordered the forts at Taranto and Brindisi and the coast defenses of Messina to place themselves in readiness against an attack from the sea, and the other coast defenses to consider themselves in the "position of alarm" in the time of peace. He also installed at Vittoria a radiotelegraph station, and had another one kept in readiness to be placed where it might later be required.

Turkey had forces in Tripoli amounting to about 5,000 men, and in Cyrenaica about 2,000. The fortifications on the coast were antiquated and mediocre in their armament, hence of little value, and the tentative union of the Arabian *redifs* (chiefs) could be considered as a failure.

The war, owing to the character of the governmental policy, had to be declared at a moment when the climatic conditions at sea were not propitious for the landing of troops and equipment; but any delay in the operations would have greatly minimized our prestige and augmented the difficulty of the enterprise, because Turkey

would have assuredly taken advantage of this to send new troops, arms, ammunition, and provisions to Libya, and to further arouse the Arabs against us.

It was at first thought that a few acts of capture would be sufficient to cause the Turks to settle the matter diplomatically, and with this end in view it was intended to occupy central points on the coast, regarded as valuable politically and strategically; namely, Tripoli, Tobruk, Derna, Bengasi, and Homs.

Owing to the hostility of the Arabs, kindled and kept aflame by the Turks, it was found necessary to reinforce the corps of occupation and to establish firmly the necessary bases from which to proceed for action into the interior.

It became evident that the resistance of the Arabs was made possible by contrabandists, who, widely organized, were carrying on their work from Tunisia and Egypt and from various points along the coast not occupied, and it became necessary to provide troops to prevent, as far as possible, the enemy receiving arms, ammunition, etc. This caused the occupation of Zuara and Misurata, and it was one of the reasons which caused the occupation of Dodecaneso in the Ægean.

Simultaneously the marines, besides protecting the various convoys, coöperated with great efficacy in the many operations of the landing forces, and without any assistance and with admirable bravery made landings in the Ionian Sea, in the Red Sea, on the coast of the Yemen, on the coast of Syria, and in the Straits of Dardanelles.



In Camp at Bengasi.



Garden and Vita of Bercas.



TRIPOLI.—Infantry Landing from Pontoons.



TRIPOLI.—Tombs.

The theater of operations, therefore, limited at first to the coast of Libya and central Mediterranean coasts, extended finally along the Mediterranean to the Red Sea, involving the coasts of three continents.

The troops and their equipage during the twelve months of war gave continued proof of their technical value and their military worth, sustaining with great fortitude the trying and prolonged worriments; the excellence of the matériel and the knowledge and skill of the commanding officers, both ashore and afloat, notwithstanding the long time at sea and the numerous bombardments, retained to the end of the war their integrity and wonderful efficiency.

The war may be divided thus:

- (a) The first occupation (October, 1911);
- (b) The establishment of bases (until March, 1912);
- (c) The intensification of the war in Libya and the Ægean (from April, 1912, to the conclusion of hostilities).

THE FIRST OCCUPATIONS.

(October, 1911.)

Hostilities were begun with brilliant action on the part of our forces in the Ionian Sea—that is, with the bombardment and the silencing of the ports of Tripoli, and with the occupation of the city by 1,700 sailors; a stroke of valor which repulsed and frustrated the vigorous attacks of the Turkish troops for seven days, when finally, the 11th of October, the first troops of the expeditionary force landed, and the proud sailors returned to their ships.

The political and military situation developed into something different from that which was at first expected. The population along the coast and the towns near by became hostile. The efficacy of the Turkish propaganda, nourished by continuous assistance of arms, men, and money, renewed their hatred and revived hope in the success of the war. So that the Turkish Army became, little by little, transformed into what may be called a great square about the armed and turbulent Arabs. They profited by their admirable knowledge of the intricate and treacherous locality, and proved themselves adversaries capable of prolonging the conflict. Their religious fanaticism and savage instincts also fomented the rebellion in Tripoli, in the immediate vicinity of and adjacent to our lines of defense.

Combats of Henni-Sciara Sciat (October 23) and Henni-Bu
Meliana (October 26).

The outbreak occurred October 23, 1911 (Henni-Sciara Sciat), on which day, and during the combat of October 26th (Henni-Bu Meliana), the valor and firmness of all of our troops underwent a severe trial; for they repulsed an adversary strong in numbers, masterly in



Krupp Guns of 87 mm., Captured at Ain Zara. Note the Palm-leaf Screen.



In Camp at Ain Zara.



HOMS.—Panorama.

deceit, tenacious in close quarters, and who took advantage of all the cover afforded by the terrain.

Our losses were not light, but justified by the result, and showed that the *morale* of our troops was excellent.

In the meantime other points along the coast were occupied.

Occupation of Tobruk (October 4), Derna (October 18),

Bengasi (October 20), and Homs (October 21).

From the 4th of October, 1911, our flag had been flying at Tobruk, whose harbor afforded the best anchorage in all Tripolitania and Cyrenaica. It was used as a base for our Navy, which was operating in the waters of Cyrenaica. Augosto was used as a base for the Tripolitan coast.

In the last two weeks of October the following points were occupied: Derna (18th), Bengasi (20th), and Homs (21st).

The landing from the battleship *Giuliana* (19th), which was the prelude to the taking of Bengasi, hampered by heavy seas and resisted by the enemy, represented one of the most brilliant actions of all the war, and was the beginning of the coöperation between the Army and the Navy which won such excellent results and which continued in later ventures. On that date also occurred the conquest of Berca, defended by the Arab-Turks, tenaciously but in vain, against our impetuous troops.

#### ESTABLISHMENT OF BASES.

#### ZONE OF TRIPOLI.

Combats of Hamidiè (November 6, 1911) and Renni-Messri (November 26, 1911).

In Tripoli the eastern line of defense had to be with-drawn on account of hygienic demands and for military purposes; hygienic demands, because of the numerous dead bodies of the enemy remaining in the vicinity of the line after the battles of Henni-Sciara Sciat and Bu Meliana, and the consequent fear of contagion to the troops in the trenches; for military purposes, because it was necessary to divide the troops along the line of defense in proportion to the number at hand, and this resulted in the unequal development of that line and gave entry to the Arab-Turks.

The original southern line had to be maintained, because it held the wells of Bu Meliana, which supplied the water to the city. The troops retired from the heights of Sidi Messri, Henni, and the Hamidiè Battery to the line Sidi Messri, Hamura, Feschlum, and the Tombs of Caramanli. The danger from contagion being over, we engaged the enemy, upon the arrival of fresh troops from Italy, on November 6th, and after a lively and tenacious fight the Hamidiè Battery was re-occupied, in order to diminish their desultory attacks and to prevent them from gaining a flank position to our line of defense. On the



Artillery Spotter.



HOMS.—Heights after the Occupation.



BENGASI.—Oasis of "Two Palms."

18th a great number of Arab-Turks, intrenched near the Tombs of Caramanli, were attacked and dispersed. On the morning of November 26th, after a forced suspension of activity caused by heavy rains, the forts of Messri were re-occupied; and at 4:00 P. M. Henni and the region immediately east of the Hamidiè Battery were also taken, after an active combat around huts, walls, and defended heights, which were finally destroyed by dynamite.

### Combat and Occupation of Ain Zara.

(December 4, 1911.)

It now became necessary to make a further advance upon Ain Zara to rout the Arab-Turks, because by occupying this town an efficient watch could be kept over the caravans traveling through the desert, the southern outskirts of the oases, and the communications between Tripoli and Tagiura. This also assured us the possession of the city and enabled us to keep a better watch over the malcontents, whose actions were not to our advantage.

On the morning of December 4th, after a rainy night and heavy storm at daybreak, our troops moved on to the conquest of Ain Zara. The attack assumed an episodic character. Later in the day it became necessary to bring on the line several mountain batteries, because of the terrain (all dunes of a misleading character), and because of the very small range of vision. This was, moreover, necessitated by the special style of combat of the enemy, who, with wonderful ability, took every advantage of the

cover afforded by the terrain, passing rapidly from one point to another to take up fire upon our line from long range, then closing in upon our lines as soon as our batteries approached the mid range.

As soon as the various groups of the adversary had been dispersed, our columns united and carried the last trench. Towards night we arrived finally at the edge of the high plain which overlooks Ain Zara.

The enemy was retreating in disorder towards the south, shelled by the artillery, leaving in our hands seven Krupp guns (87 mm., 3-in.); small arms; ammunition for both artillery and rifles; many animals and much matériel.

As night was falling and the ground was wet and treacherous, and the cavalry fatigued from opposing the Arabs proceeding from Zanzur, the pursuit of the enemy was not a vigorous one.

With Ain Zara occupied, our dominion on the extreme eastern limb of the oasis of Tripoli was assured; with the occupation of the oases of Sahel and Tagiura (December 10–13, 1911), it became necessary to extend our field of operations in the desert zone towards the oases which ranged along the extreme slope of the higher plane; oases which were pointed out by our aviators as bases from which our enemy was sending men and provisions, and which were being used as meeting-places for the tribes to maintain actively the fanatical propaganda.



After the Battle at Bengasi.



Gymnastics.



Applied Gymnastics—Italians Dislodging Bedouins at Bengasi.



BENGASI.—Center of Resistance.



Valley of Derna.

### Reconnaissance.

The cavalry reconnoitered towards Bir Tobras and Bir Edin; and on December 17th a battalion of grenadiers pushed as far south as 12 kilometers (8 miles) below Ain Zara; on the 19th a mixed detachment went to Bir Tobras to liberate Arab families who were loyal to us, but held captive by the enemy. In this last reconnaissance officers and men had been subjected to long and continued hardships and all the privations and dangers of an uncertain situation, but they attacked with ardor, valor, and firmness in a manner to impress the adversary, who were emboldened by their superiority in number. tachment hoped to obtain an easy success against a small number of troops detached from their base, and who were for the first time fighting on a desert terrain devoid of sustenance. The detachment succeeded in making an undisturbed retreat, carrying their wounded and all their equipment; overcoming the difficulties of orientation on a dark night, they returned on the morning of the 20th to Ain Zara.

# Battle and Occupation of Gargaresc.

(January 18-20, 1912.)

Our occupation had now to be extended principally towards the east, in order to protect the marble works in the garrisons around Gargaresc, and to prevent the raids of the Arab-Turks upon the population loyal to us. On January 18, 1912, the enemy was attacked and defeated

by our troops; on the 20th the town was garrisoned and work immediately begun to fortify it.

Second Combat of Ain Zara.

(January 28, 1912.)

On January 28, 1912, after a respite, a violent attack was made on Ain Zara; and around Tripoli a series of forays were made by the cavalry and small mixed detachments. Numerous trips were made by our intrepid aviators, dropping bombs on the enemy, whose attacks on our redoubts and detachments were in every case vigorously repulsed.

#### ZONE OF HOMS.

In the meantime combats were being carried on with intensity and without truce along other points of the coast, and each one was a new success to our arms.

Reconnaissance of Lebda.

(December 1, 1911.)

At Homs, to break the Turkish telegraph lines and to impress the Bedouins encountered in the vicinity of Lebda and near the slopes of Mesellata, we attacked the enemy on the 1st of December and defeated them about 4 kilometers (2½ miles) southeast of our trenches. Thereafter the attacks on our line were insignificant, and the time at our disposal was utilized in fortifying the position we occupied. This work was not simple, owing to

the natural configuration of the ground around Homs, hidden from view along the littoral by the oases of Lebda and the numerous Roman ruins, which occupied a great deal of the territory in those parts, dominated towards the west and southwest especially by the hills of Mergheb—a point excellently defended, and facing Homs with a clear range of vision.

Combat and Occupation of Mergheb.

(February 27, 1912.)

This strong position at Mergheb had been noted; and occasionally from its heights cannon had been fired upon the city. It was therefore found necessary to occupy these heights. This was carried out decisively on the 27th of February. To diminish the forces of the defenders, a well-simulated move was made towards Sliten to entice the enemy in that direction; meanwhile three of our columns approached Mergheb silently, and the Arab-Turks were accordingly surprised. The enemy than made a violent counter-attack; but after a mixed and close combat and an impetuous flank attack by our columns, the enemy was routed by a bayonet charge.

Night Combat of Mergheb.

(March 5-6, 1912.)

In spite of their losses, the enemy did not give up; and on the night of March 5-6th they attempted to regain their former position by a furious attack, hoping to find

our vigilance relaxed. Officers and men had, however, intelligently fortified their position and were eagerly on the watch, so that the Arab-Turks found the defenders calm and assured of their position, and suffered consequent losses. Meanwhile, to the east of Homs, our troops frustrated a tentative attack made with the object in view of diverting the attention of the defenders of Mergheb.

#### ZONE OF BENGASI.

In the days subsequent to our occupation, the nucleus of the Arab-Turks had by preference rallied in the oasis near the city of Bengasi, aiming to have better facilities to secure their provisions and to keep in touch with the inhabitants.

# Combat of Koefia.

## (November 28, 1911.)

After having advised the outposts (established at Daut-Luba and Ras el Ferg), a column consisting of the three arms pushed towards Sidi Califa the 28th of November, and at Koefia our troops, after ably overcoming the difficulty of the terrain, and giving proof of their vigor and ardor, surprised and dispersed a large force of Bedouins, who left on the field 21 dead, among them chiefs of the Avaghir tribe, who had entered the combat on horseback.

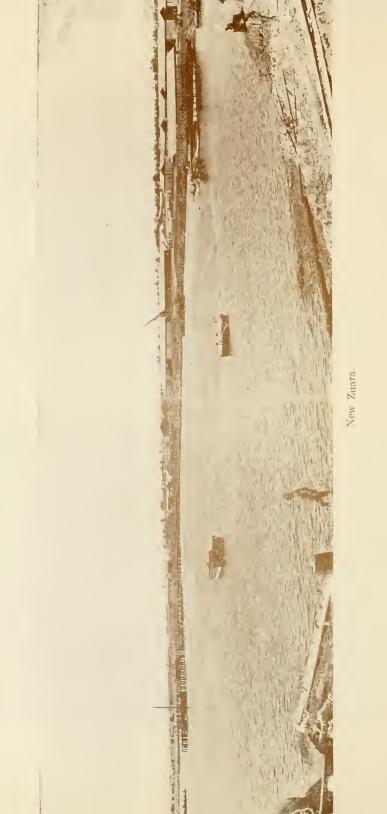
Towards the end of November and the beginning of December the work of systematizing the defenses of the city proceeded uninterruptedly, and meanwhile the Arab-



Instructions on Board Ship.



Castle of Orfella.



Turkish force was rapidly growing, augmented by the arrival of the regular troops from the Egyptian frontier, as well as by the assistance in this respect of the population of the hinterland. The tactics preferred by the enemy were to simulate night attacks, with the object in view of disturbing the repose of our troops and provoking useless expenditure of ammunition, and hoping to surprise the advance works of the defense and the line of security of Bengasi.

These sporadic attacks were always promptly and energetically repulsed with the assistance of our Navy, who coöperated in the fire-action and with their searchlights illuminated the terrain near our lines and contiguous to the sea. The Navy, besides bombarding Koefia, bombarded the oases of Suani Osman, Tolmetta, Bersis, and Tocra, to punish the inhabitants, who were giving aid to the enemy around Bengasi by furnishing men from their tribes.

Defense of Bengasi.

(December 25, 1911.)

After a brief respite, from the 16th to the 21st of December, the activity of the enemy manifested itself on the 22d by an attack upon a camp redoubt and a defended post. This was a prelude to the general attack upon the city on December 25th. This action involved only the artillery, as the Arab-Turks advanced cautiously and

kept a great distance from the lines. The other arms, ready and on the watch, consequently participated neither in the action nor in the defense of the trenches nor in the counter-attacks.

The artillery opened up an efficacious and continuous fire at 3,800 to 4,000 meters (4,000 to 4,300 yards), using 29 pieces, each one firing on an average of 39 shots. There were no appreciable losses; and when it is taken into consideration that the firing kept up all day, the expenditure of that amount of ammunition was justified. The batteries gave proof of their perfect fire-discipline, excellent technical and professional preparation, efficacy, and coördination of action.

The enemy took advantage of nightfall and retreated, leaving on the field 200 dead, several hundred wounded, two dismantled guns, and many horses.

Battle of Suani el Rani or "Due Palme" ("Two Palms").

(March 12, 1912.)

Serious losses occurred two and one-half months afterwards in the battle of Suani el Rani, better known as "Two Palms."

From December to March the work of the enemy was limited to small skirmishes around our redoubts and outposts or with our reconnoitering parties; on the 12th of March they showed considerable force and started a general attack upon the city, but hesitated, owing to our im-



Landing at Kalitheas.



A Halt during the Advance on Rhodes.



Panorama of Psitos.



Turkish Prisoners.

mediate and energetic counter-attack. They attempted to withstand the attack, but in vain; our valorous troops surrounded them with a ring of fire and steel and annihilated them. Nearly one thousand were left dead on the field, while many more died in consequence of their wounds.

The result obtained was the reward of constant cooperation of the various arms and of the intelligence, discipline, and incomparable dash of our troops. The behavior of our infantry was splendid; their advance under the heavy fire of the adversary is deserving of every praise. Calm and in good order, with excellent examples set by their officers, they launched themselves upon the enemy, engaging them in a hand-to-hand conflict, from which they emerged victorious.

This day set the seal of approval on the excellence of the organization of the artillery, who did their work patiently, and gained their fire of position with a clearness of scope. The functions and range of the field and mountain batteries were excellent; the pieces were light and ably handled, and the ability to make hits and the discipline were perfect.

The cavalry assaulted in an orderly and prompt manner. They carried out the orders to protect the right wing from attack, and later assisted in developing this wing in a most commendable manner.

Even the intrenchments and field works of Bengasi revealed their efficacy by the fact that a decisive and offensive action took place under their immediate protection, and (the artillery of a whole sector was brought into action) demonstrated the excellent position of these works and that they dominated the surrounding terrain.

The battle of "Two Palms" greatly dampened the ardor of the enemy, and they no longer attempted to attack in force. Our aviators dropped bombs on them, and our Navy bombarded various points along the coast. So they contented themselves with small attacks against our redoubts and workmen, but were always easily repulsed. At times they fired upon our troops while at drill. The three arms were drilled daily to keep them in trim and to intimidate the enemy.

#### ZONE OF DERNA.

The garrison of Derna had to show its mettle, owing to the topography of the terrain in that vicinity. The city was situated on the face of a rocky cliff; there was no accessible way to reach the higher plain, nor could one be built, as the rock was composed of limestone and crumbled. The higher plane had also a wide gap, caused by rain and sun, which did not present any foothold, being cut up by sharp cliffs and thick, impassable vegetation. This precipice was honeycombed with caverns and cells, greatly assisting the inhabitants in their innate spirit of brigandage and rapine.

Therefore a great deal of difficulty was experienced with this terrain in securing a line of defense, either towards the east or towards the west, to protect the potable water.



Turkish Prisoners



RHODES. -Tower of the Angels.



RHODES.—Departure of Troops.



Ruins at Lebda.



MISURATA.—Cape Zarrug.

The encounters fought here until September, 1911, were not of a decisive character, because it would have been perilous and imprudent to venture into this unknown and impervious zone to follow the enemy into possible ambush. But they offered themselves continually to our fire—both the fire of the troops who protected the workmen and in general attacks made with the hope of recapturing the city.

Defense of the Redoubts of Lombardia and Calabria.

(February 11-12, 1912.)

Defeat after defeat occurred to the Arab-Turks, a memorable one being the night attack February 11-12th, commanded by Enver Bey.

The battle of Sidi Abdallah (March 3, 1911) also proved disastrous for the enemy. They displayed their forces in the manner most favorable to them, taking advantage of the cover afforded by the difficult and treacherous ground. The day was one of laborious combat; but the great forces of the adversary, with their knowledge of the terrain and their fanatical enthusiasm, were met by the sturdy opposition of our troops, who, at the proper time, encountered the foe with firmness and charged them with impetuosity.

INTENSIFICATION OF THE WAR IN LIBYA AND THE ÆGEAN.

(From April 12th to the Declaration of Peace.)

### ZONE OF ZUARA.

To put a stop to the contraband of war in Tunis, it was decided, in the latter part of December, 1911, to make a landing at Zuara; but heavy seas, due to high winds, which continued for three weeks, caused the abandonment of the enterprise. The Navy, however, had a chance to prove its great value, and the troops to demonstrate their patience during their long confinement aboard ship, from the 22d of December to the 14th of January, on which latter date the enterprise was definitely given up.

Landing at Macabez.

(April 10-14, 1912.)

Persisting, however, in the necessity of preventing this smuggling, another attempt was made to land at Zuara in April, 1911; but, owing to various nautical and military features, it was decided to land at Macabez instead. This landing was accomplished by all the arms in four days, after experiencing great hydrographic difficulties. Again the Navy showed their ability to cooperate with the troops.



Landing at Misurata.



Skirmish Advance on Mismata.



Artillery Advance on Misurata.



Trenches—Oasis of Misurata.

The beach, Fort Bu Chemesc, and the caravans were taken possession of, all of which were to serve to carry the expeditions into the interior towards the new lines of communication, which the Arab-Turks would not have failed to single out.

Our troops were well tried in the long and obscure work, landing upon a beach open and deserted (probably the only case of its kind where such maritime conditions were overcome), desiring to face an enemy who could display a force and ardor worthy of the effort made to reach them.

The enemy appeared on the 23d of April at Bu Chemese, and our gallant soldiers had their desires fulfilled. With great violence and vigor, the enemy attacked successively from the east, southeast, and west.

Mowed down by the artillery from our works and from our counter-attacks, after a spirited combat they were compelled to retreat, leaving a great number of dead and wounded.

Operations for the Occupation of Sidi Said.

(January 26, 27, 28, 1912.)

The frequent offensive reconnaissances sent out by our troops had permission to capture the caravans and to disperse the Arab-Turk convoys, but it was not altogether easy nor convenient to halt and sustain themselves, owing to the absolute hostility of the inhabitants and the difficulty of maintaining communications across the uninterrupted series of streams (called *sebche*) that run through the middle of the zone of Bu Chemesc.

The enemy (consisting of several thousand men, many horses, and some cannon) attempted to oppose every tentative move we made towards the caravans. But, uncertain of the direction of our movements and because of our persistent activity around Bu Chemesc, they formed a cordon with a front of about 30 kilometers (19 miles), out of range of our artillery, with their right on the stronghold Sidi Said and their left eastward of the Tunisian border. With this ample front, and not having been sufficiently harassed by our troops, who had only gone 15 kilometers (9 miles) inland, they had little by little strongly fortified themselves.

After the decision to attack, to avoid proceeding through the inhospitable region next to the Tunisian border, it was decided to march in two columns from Macabez and Bu Chemesc, respectively, to mass against the position of Sidi Said, the conquest of which would in all probability determine the fall of the Arab-Turk defense. And so it happened; the methodical plan of attack was crowned with success on the victorious days of June 26th, 27th and 28th, which gave us possession of Sidi Said, a very important position on the road of Zelten and Zuara, and gave us uncontested domain of 40 kilometers (26 miles) of coast, from the Tunis border to Sidi Said and to the line of streams.

The losses of the Arab-Turks were more than 700 dead, left on the field, and a large number of wounded;

arms, ammunition, animals, and various matériel fell into our hands.

Our troops behaved admirably, as did the commanders who led them on to victory; and with the faith that was placed in them, everything seemed possible in the face of the difficult terrain, the enemy, the climate, and resources. The spontaneous and intelligent accord between the various commanders, arms, and the Army and Navy corresponded excellently to the particular requirements during the three days of operation, constituting in their completeness a prepared offensive combat.

### Battle of Sidi Ali.

# (July 14, 1912.)

A few days later the opportunity presented itself to extend our territorial occupation as far as Sidi Ali, a high position 6 kilometers (4 miles) to the eastward of Sidi Said, which would assure our halt during our stay in this latter locality, an advanced post, and an excellent point of vedette on the Zuara road; and it would impede in the meantime the Arab-Turks from assembling at and using this point from which to molest our occupation of Sidi Said. This point was carried on July 14th, after a brilliant reconnaissance by one of our flying columns, which disposed of the fear of any serious threat on the part of a nucleus of the enemy assembled to the southward of Bu Chemesc. The combat was violent and at close quarters, and the enemy numerous, reinforced from the Sahara the

day after Sidi Said. Terrific heat tended to diminish our forces; but the troops maintained, as always, an elevated spirit, and their conduct was admirable.

The enemy was beaten and demoralized. "It is destiny," so terminated a canard in a Tunisian newspaper. "Ah! destiny, the prophet of reason, is with the Italians, and our troops fall like flies before the enemy's fire." There was no further need to defend Zuara, a city exposed to the fire of our Navy, as was also the surrounding terrain. Its peculiar conformation and works erected by the enemy were adapted to a tenacious resistance.

Occupation of Zuara.

(August 6, 1912.)

Our troops entered with hardly any casualty, after having dispersed small squads of the enemy's rear guard.

Zuara was the objective towards which operations were to point after the abandonment, because of logical difficulties, of any further penetration of the Tunisian border. This was, besides representing the center of habitation, the most important of all the vast region to the eastward of the border. Regdaline was the principal gathering-place of the caravans which proceeded from the border to the eastward. To the south of Regdaline the country was a desert waste, not containing sufficient water to allow the passage of numerous caravans. Therefore, with the zone of Zuara-Regdaline occupied, the train of caravans that had used the trail close to the sea were



DERNA.—Bu Msafer.



DERNA.—Halg Giaraba.



OASIS OF ZANZUR.—Photograph from Dirigible

effectively intercepted and eliminated, and the great contraband trade was limited to the mountain roads, which were so distant and difficult that it was not found worth while to consider them. It was impossible to attend simultaneously to the two objectives, Zuara and Regdaline, owing to the insufficiency of forces. Zuara, if found undefended, could be reached on the same day, and an offensive operation made against Regdaline and Menscia on the following day, to cut off a caravan coming from the west. It was found convenient to abstain, owing to the extreme high temperature and the hardships the troops were subjected to, deprived of the bare necessities, which were still on board, and because of the youth of the men of this class.

On the other hand, the day after the occupation it was discovered, without doubt, that a general uprising amongst the inhabitants was contemplated, and they would be joined by the armed "Mehalle" in case our vigilance between Zuara and Regdaline was at all relaxed.

Combat and Occupation of Regdaline.

(August 15, 1912.)

With the troops reorganized and fully equipped, the advance towards Regdaline was made August 15th.

The enemy, remembering our impetuosity and firm intent to win, experienced at Sidi Said and Sidi Ali, comported themselves accordingly when we confronted them *en masse*; the more audacious ones, however, rallied on

our extreme left and opposed us in close quarters; but our troops, with their usual valor, did not delay in flanking and dispersing them.

Thereafter and until the declaration of peace our only engagements were small skirmishes or artillery fire upon caravans in the distance.

#### OPERATIONS IN THE ÆGEAN.

The better to prevent the smuggling of arms from Turkey to Libya, to aggravate the moral situation of the enemy at home and abroad, and to have pledges in our favor in case of a peace treaty, it was decided to occupy some of the islands in the lower Ægean.

The island of Stampalia, on account of its topographical conformation and its central position regarding the islands in the lower Ægean, was selected as a base for the naval forces detailed to operate in those waters, and was occupied April 28th. An expeditionary force that was being organized at Tobruk sailed on the night of May 3d–4th, escorted by the ships of the second squadron, and proceeded to the isle of Rhodes.

## Expedition to Rhodes.

This island, bound to Italy from time immemorial, is certainly the most important of the Sporades group, and also economical as a station for transit from the eastern to the western cities of the Mediterranean, in spite of its squalid decadence since the sixteenth century.





Two Views of Zanzur Battlefield.



Italian Colonial Troops.



Squad of Meharisti.

Landing at Kalitheas and the Battle of Asguru.

(May 4, 1912.)

The expeditionary force rapidly landed at Kalitheas before daylight on the 4th, met the enemy at Asguru, and dispersed them; the following day Rhodes was entered.

We decided not to give the Turkish garrison a chance to organize armed bands or receive reinforcements; but before a decisive engagement was fought it was necessary to construct a solid base which would guarantee the safety of the operating troops. Political and military preparations were also necessary for various reasons, and could not be hurried, requiring great foresight in order to arrive at the desired end. This work was completed on the 14th, nine days after the entrance of our troops into Rhodes; thereafter they were able to march into the interior.

Battle of Psitos.

(May 16-17, 1912.)

The enemy, after being disbanded during the retreat on the 4th, gradually rallied at Psitos; which was an advantage for us, for we could encounter the whole force, and not have prolonged warfare with fractions of their troops. The intent was perfectly carried out, after difficult and fatiguing maneuvers; the opportune dispositions of the command, the admirable accord between the Army and Navy, and the magnificent conduct of our troops won for us this reward.

For the first time in history, rapidly and without the slightest inconvenience, two landings of troops and matériel were contemporaneously made at night, without the assistance of moon or lights, on a shore open and hostile.

The merit of the excellent results obtained belongs to the Navy, for the skill and ardor demonstrated, and to the troops, who behaved with dash and perfect discipline. Our troops marched fourteen hours at night, across country unknown, mountainous, broken by deep ravines, rough and steep paths, yet they were able to arrive on the field of action and enter into combat against fresh troops.

The Turks at Psitos found themselves surrounded by a ring of steel, and endeavored in vain to escape; at nightfall they took refuge in the valley of Maritza, followed and held there by our troops, and on the following day they were made prisoners. Immediately afterwards our troops, in spite of the day's battle following the fatiguing march and notwithstanding the unsatisfying repose of the previous night, spent on the rocks, took up the return march to Rhodes, covering in forty-eight hours (twenty hours' marching time) a distance of 75 kilometers (50 miles) or more, under conditions anything but normal and on haversack rations. We have therefore a proof that our troops are inexhaustible, precious and enviable treasures of military virtue.

On the 12th of May the fleet landed sailors on the

islands of Scarpanto, Casos, Episcopi, Nisyros, Calymnus, Leros, and Patmos, and captured the small Turkish garrisons and raised the national flag. Successively they occupied the islands of Cos, Symi, and Calchi, so that during the month of May the southern Sporades fell into our hands.

ZONE OF HOMS.

Battle and Occupation of Lebda.

(May 2, 1912.)

The garrison at Mergheb was reinforced, and then it was found necessary to push towards Lebda, in order that our troops might have freedom of movement to the eastward.

Exact account had been kept of the enemy and their disposition, so that the attack was planned for the 2d of May. While the garrison at Mergheb engaged the enemy in their vicinity, two of our columns advanced silently and in accord upon Lebda, to surprise the adversary. They, however, managed to extricate themselves from our grasp in a precipitate flight, but they suffered heavy losses, and on that victorious day left in our hands the ruins of an antique city of the Roman Empire.

Battle of the Monticelli di Lebda.

(June 12, 1912.)

The activity of the enemy was subdued after the

sanguinary engagement at the Monticelli, June 12, 1912.

The garrison at Homs having been diminished by the departure of several detachments, needed at other posts, the hope arose among the Arab-Turks that they could attack our line of Lebda (the Monticelli) and Homs to advantage. Their illusion, however, was replaced by a tragic realization when, having failed to surprise us, the Arab-Turks beat a hasty retreat: some towards the south, raked by a rapid and accurate fire from our batteries; some towards the deep ravines of Lebda, where our men, indefatigable and exalted by victory, followed them tenaciously, so that not one of the enemy thus cut off managed to escape. A detachment of Arab-Turks on Mount Rosse did not have time to extricate itself and was "nailed to the spot."

This made the fourth victorious combat for the troops of Homs, undoubtedly unprecedented for positive and moral results, and which greatly contributed to the pride of the Italian soldier; as our forces in these cases were much smaller than those of our adversary, whereas in other cases our forces were numerically stronger.

The greater losses were inflicted upon the enemy by rifle and artillery fire, but the bayonet also had its place of honor; glistening along the line, furiously seeking the enemy, closely pursuing, and finally engaging him in mortal combat.

After this complete and bloody defeat, the activity of the enemy ceased around Homs. Entanglements of wire and other material were made to keep off the ma-



BENGASI.—Sentries of a Battery.



Hospital Ship.



Customs Wharf at Tripoli.

rauding Bedouins. A few shots, however, always put them to rout.

### ZONE OF MISURATA.

In order to extend our occupations towards the west on the Tripolitan coast, on the 16th of June, nearly two months after the capture of Macabez, a surprise landing was made on the coast of Misurata. The operations were carried on with such excellent order and celerity that we only met with a futile resistance. A battalion of sailors and a company of infantry landed and dispersed the small number of the enemy assembled on the beach, and with admirable impetuosity immediately occupied the hill and pushed on to Ras Zorug. The balance of the expedition was landed and undisturbed, and on the following day the oasis of Kasr-Hamed was occupied.

It might have been possible to send a detachment to Misurata immediately, taking advantage of the disorganized enemy and the panic of the population; but such a resolution might have been repented, owing to the limited forces at hand; it being necessary to leave on the coast a considerable number of troops to protect the landing of matériel and to establish and garrison a base.

Battle and Occupation of Misurata.

(July 8, 1912.)

But on the 7th of July, after twenty days' lively work, the defense of the base was systematized, and on the 8th we occupied successively the oasis of Misurata and Zarrug, and then the city of Misurata. The enemy, after the capture of Zarrug, made weak resistance here and there, having been at Zarrug subjected to artillery fire and the violent assaults of our troops, and put to rout.

Our men, now veterans of nearly all the other combats, behaved with admirable ardor and dash, physical resistance, and excellent discipline. They took advantage of all the cover of the terrain, and therefore their losses were relatively slight.

As soon as Misurata was occupied, a military and political régime was immediately begun against the enemy, who had fled to the south and west of the oasis of Misurata. At times they showed force and committed acts of violence against the inhabitants of the surrounding country, who asked for our protection.

Battle of Gheran.

(July 20, 1912.)

The enemy was then dispersed by one of our brigades, composed of mixed troops, sent to Gheran; their activities were thereby reduced to small attacks against our outposts and redoubts.

ZONE OF DERNA.

Advance on Sidi Abdallah II.

(September 14, 1912.)

In July the possession of Derna was assured by the



Arming a Battery at Ain Zara.



Advance on Regdaline.



Camel Battery.



Transporting Cannon.



Transporting Cannon.

defensive belt of works, erected between 2 to 3 kilometers (I to 2 miles) from the inhabited center, and other works for immediate security. The enemy's force, not exactly computed, but judged to be between eight and twelve thousand men, were encamped on the left of the ridge, out of range of the heaviest artillery. The adversary were not anxious to attack the encampment, but from long range dropped a few shells, which did no damage, but gave ground for the articles which appeared in the foreign gazettes, that we were being besieged by the troops of Enver Bey. Having received reinforcements, and being sure of the safety of our base at Derna, on the 14th of September we advanced, with the intent of occupying Rudero at the head of the Laggati, to construct an occasional work; and to take up the position of Kasr Ras el Leben and of Casa Aronne to protect the workmen at Rudero. The enemy refused to contest our advance, and withdrew into the interior, but the material and moral results consequent to this move were great, because it demonstrated that we could work and impose upon the enemy at a distance from our encampment and our guns at Derna

Battle of Kasr Ras el Leben.

(September 17, 1912.)

On the 15th and 16th of September the enemy made tentative and weak attacks here and there on our front. The 17th was the day of battle. This engagement was not preordained on our part, bur it was a direct consequence of our advance and the location assumed and maintained from the night of the 14th.

The battle was composed of three distinct actions: a weak one early in the morning on our extreme left, in which the enemy was easily repulsed; the other two respectively heavy, at the head of the Bent in the morning, and again on our extreme left in the afternoon; but in the evening the enemy was defeated and left the field covered with dead and wounded.

On that memorable day the Arab-Turk forces, several thousand strong, with plenty of well-commanded artillery, conducted by Enver Bey, arrayed themselves against the solidity, calmness, and vigor of the counter-attacks of our troops, white and native, conducted by the conspicuous ability of our officers and guided by a clear conception of tactics, with harmonious and effectual opportune dispositions of troops.

Our losses of 10 officers and 174 men, dead and wounded, were small compared with those of the enemy, of whom 1,135 were found dead near our lines.

Battles of Sidi Abdallah III. and Braksada.

(October 8-10, 1912.)

To enlarge the line of works in the western zone, Sidi Abdallah and Halg Giaraba were occupied on October 8th, after having attacked and defeated the enemy, who later, on the 10th, were again defeated at Bu Msafer, suffering heavy losses.

ZONE OF TRIPOLI.

Battle of Sidi Abdul-Gelil or Zanzur.

(June 8, 1912.)

From Sidi Abdul-Gelil towards the south and west of Gargaresc, the Arab-Turks managed little by little to construct and fit out a long line of intrenchments (Boer fashion), reinforced, traversed, blind covers and covered passages, from which they could advance towards our front at Gargarese, while at other points they kept from 15 to 20 kilometers (10 to 13 miles) away from our outposts. Therefore, it was necessary to remove this menace so close to our line, and with the fond hope that a victory on our part would win over to us the Ursceffana Tribe, who were showing some signs of discontent; also to destroy these trenches at Zanzur that were closing our works at Gargaresc, and which were considered impregnable. For military reasons and for reasons of policy and morale, the attack on Zanzur was made on Tune 8th.

The Arab-Turks tenaciously defended the trenches of Sidi Abdul-Gelil, but our troops surmounted every obstacle with irresistible impetuosity and charged in a long line with the bayonet. The enemy made a desperate resistance, but were finally put to rout. They fled to-

wards the oasis of Zanzur, followed by rifle and artillery fire. So that, after less than four hours of fighting, the treble and strong line of intrenchments of the Arab-Turks, proclaimed impregnable, fell into the hands of the Italian soldiers.

In the meantime a hostile column, 10,000 strong, attempted to turn our left flank, which was operating against Sidi Abdul-Gelil; but two of our reserves were being held at Gargaresc and Bu Meliana, respectively, so that while one reserve faced the enemy, the other attacked their right flank. It was impossible to close the two reserves on the enemy before they retreated. Great loss was suffered by the Arab-Turks.

On this day we had 43 killed, 1 officer, and 278 wounded, of which 13 were officers. The enemy lost about 2,000 dead and a relative number of wounded.

Our officers and men did their duty in an admirable manner, audaciously and with dash on the offensive, calm and tenacious on the defensive. In the fourteen hours of close combat and maneuvering the temperature fortunately was not as high as it had been on the preceding days. The Ascari (native troops) demonstrated their excellence as soldiers and the devotion they had for our flag.

Battle of Sidi Bilal.

(September 20, 1912.)

The occupation of the heights of Sidi Abdul-Gelil gave us the control of the oasis of Zanzur. With a view, how-



Wharf at Gargaresc.



TRIPOLI.—Trenches at Bu Meliuna.



TRIPOLI.—Oasis.



TRIPOLI.

ever, to further operations, it was necessary to materially secure the possession of the oasis and to push on towards the hills that skirted it on the south, to the valley of Hira; and exactly on the height of Sidi Bilal.

On September 20, 1912, three days after the bloody defeat of Enver Bey's troops at Derna, the enemy left 2,000 more dead on the field of battle, and their resistance around Tripoli was definitely weakened.

Our losses were heavy, but, compared with those of the enemy, small: 10 officers dead and 22 wounded; 105 men dead and 411 wounded.

The troops had to fight and maneuver on ground difficult to march and deploy upon. The temperature at certain hours was 90 degrees in the shade. Led by officers who set a splendid example, our soldiers of all the arms, of all the corps, and those of the Colonial troops, gave admirable proof of endurance and elevated spirit during the twelve hours of combat.

#### ZONE OF TOBRUK.

The base at Tobruk was being gradually transformed into a maritime stronghold, fortifying first on the land side and afterwards towards the sea.

The adversary was growing in numbers, and made a great many attacks against our works and skirmished with our troops on reconnaissance, but all the engagements were limited in importance; and finally, finding our defensive organization consistent in action, they ceased all hostilities at the end of July.

# TABLE OF LOSSES IN THE PRINCIPAL ACTIONS.

		Dead and Wounded.	
Locality.	Action.	Officers.	
ZUARA.	Combat of Bu Chemese, April 23, 1912	I	63
250111111	Combat of Sidi Said, June 26, 27, 28, 1912	3	236
	Combat of Sidi Ali, July 14, 1912	7	82
	Occupation of Zuara, August 6, 1912		
	Combat and Occupation of Regdaline, Au-		
/T)	gust 15, 1912	5	122
TRIPOLI.	Combat of Henni-Sciara-Sciat, Oct. 23, 1911. Combat of Henni-Bu Meliana, Oct. 26, 1911.	18	482 172
	Combat of Hamidiè Battery, Nov. 6, 1911.		10
	Combat of Henni-Messri, Nov. 26, 1911	6	119
	Combat and occupation of Ain Zara, De-		
	cember 4, 1911	7	123
	Reconnaissance of Bir Tobras, Dec. 19, 1911	2	89
	Combat and occupation of Gargarese, Janu-		
	ary 18–20, 1912	I	67
	Second combat of Ain Zara, Jan. 28, 1912		14
	Battle of Sidi Abdul-Gelil or Zanzur, June		
	8, 1912	14	320
House	Battle of Sidi Bilal, September 20, 1912 Reconnaissance of Lebda, Dec. 1, 1911	32	516
Homs.	Combat and occupation of Mergheb, Feb-		14
	ruary 27, 1912	13	80
	Night combat of Mergheb, March 5-6, 1912.	I	5
	Combat and occupation of Lebda, May 2,		
	1912	4	59
	Combat of the Monticelli of Lebda, June 12,		0.0
3.5	1912	4	86
Misurata.	Combat and occupation of Misurata, July	~7	125
	8, 1912	7 6	135
BENGASI.	Landing from the Giuliana and conquest of		113
DIMOASI.	Berca, October 19, 1911	10	95
	Combat of Koefia, November 28, 1911	3	67
	Defense of Bengasi, December 25, 1911		
	Combat of "Two Palms," March 12, 1912	17	160
DERNA.	Combat of November 24, 1911	2	74
	Combat of December 16, 1911	I	24
	Combat of December 27, 1911	10	108
	Combat of February 17, 1912		14 60
	Combat of February 11–12, 1912	1 22	227
	Combat of Sidi Abdallah II., Sept. 14, 1912.	2	11
	Combat of Kasr Ras el Leben, September	~	
	17, 1912	10	174
	Combat of Sidi Abdallah III. and of Brak-		
	sada, October 8–10, 1912	2	93
Tobruk.	Combat of Hagiass Nadra, Dec. 22, 1912	3	20
THE ÆGEAN.	Combat of Psitos, May 16–17, 1912	I	33
	Total		4,076
Resides th	e above the following were lost in minor engage	rements	at the

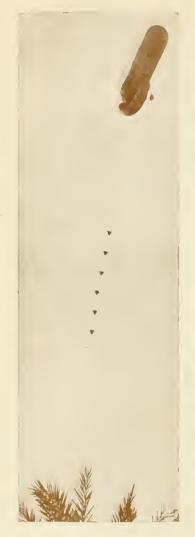
Besides the above, the following were lost in minor engagements at the various garrisons during the year of war, up to and including January 16, 1912: Officers and men, 5,652; of whom 1,432 died. Illness and disease, 1,948 died.



Radio-Telegraph at Bengasi.



Ascension of the Dirigible "Drachen."



EEE

TRIPOLI.—Cattle Corral.



TRIPOLI.—Forage Department.

### CHAPTER III.

### THE VARIOUS ARMS.

The mobilization carefully and promptly organized; the dash, the physical and moral resistance, and the technical knowledge of our troops; the enthusiasm of the country for whom the enterprise was to be undertaken—all were important factors towards success. The war, however, wore out energy and consumed ammunition and matériel of all descriptions; but no enterprise, without continued superiority of spirit to vivify it, even if excellently prepared, well initiated and well conducted, can conclude with a final victory.

Therefore it is necessary to have a complete netful of logical resources to meet the varied and important needs of the operating force; but it required a great deal of foresight and a large amount of energy to complete this fatiguing work, so obscure and devoid of tangible satisfaction.

Of these qualities the personnel of all the arms gave distinct proof in our recent war, in which the work of the Quartermaster's Corps was particularly arduous, owing to the uncertain maritime communications and the difficulty of finding a landing-place in Libya; their work was excellent and complete. They had to provide not only for collecting and sending to the theater of war provisions and matériel of ordinary quality, for the removal of

sick and wounded, of prisoners, of matériel that could no longer be utilized, but had also to furnish firewood, drinking-water, and rations.

Naples was selected as the principal base of operations for the depot of provisions and matériel, and ports in Sicily were used as minor bases.

An idea of the transportation required from October to December, 1911, can be had from the following:

Ships sailed from Naples to Libya	
Ships sailed from Sicily to Libya	25
Men transported90	,000
Horses and mules12	,000
Cattle	,000
Merchandise and various matériel (tons)40	,000

Forty-two ships were hired, but only thirty-two were used; the Quartermaster retaining the balance of the transports for the eventual transportation of 10,000 troops with their equipment.

With this fleet of transports it was thought to establish a line of communication to whatever point was occupied on the coast of Libya, in order to insure the delivery of equipment and matériel; besides a certain number of ships to be retained for an emergency, either to transport men or matériel. But as soon as this was suggested, it became necessary to send more detachments to the new occupations; and the condition of the sea was especially bad at this season of the year, this making it obligatory to meet the necessities of the troops as the occasion required and without any plans as to regular trips.

The continued heavy seas, and the fact that all the occupied points had neither harbors nor breakwaters,



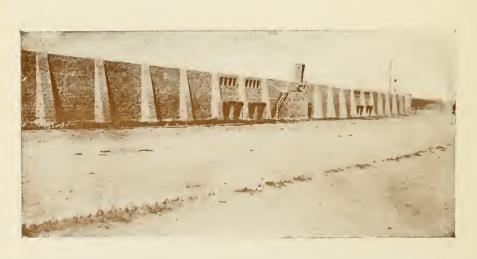
Search Lights.



TRIPOLI.—Hangar Destroyed by Cyclone December 16, 1911.



Dirigible Launched at Sea.



BENGASI.—A Section of the Line of Security.

but were simply open beaches (except perhaps Tripoli, whose harbor was only slightly protected), caused the Quartermaster's Corps great anxiety; notwithstanding the fact that they tried to break the seas by a system of anchorage in echelon, several tows were capsized and lost.

Therefore during the winter of 1911-12 it was impossible to maintain a regular establishment of provisions at the secondary dépôts on the Libyan coast, and it was with great effort that the Quartermaster's Department provided daily rations.

Having profited by this experience, the department decided to store ninety days' provisions at the various dépôts, instead of fifteen days' stores as was at first planned, in order to prevent any shortage during the winter of 1912–13.

It is to be noted that the department had few ships left for the actual transportation of stores when the following is taken into consideration: the transportation of new detachments to Macabez, Rhodes, Misurata, and Zuara, and the return to Italy of invalids and the discharged and substitutions for the Classes of 1888–1889.

# Following is a table of transportation:

Ships sailed from Naples
for the substitution of the Classes of 1888–1889124,000
Returned to Italy from Libya
Horses and mules transported
Cattle
Merchandise and various matériel (tons)

This department also provided water (which was brought from Italy in tank steamers), material to build

the dépôts, means to transport the water on shore, ice (which was sent from Italy), and later established ice machines ashore. Ice was furnished the firing-line in small boxes, specially made. All measures were taken to keep the health standard of the troops high. With this end in view, mineral water and lemons were provided, the garrisons were equipped with modern improvements to prevent an epidemic, the most effective cures and medicines were supplied, and hospitals with most recent improvements were constructed.

To transport the sick and wounded to Italy, hospital ships were used; four in the first stage of the war, and two from April, 1912, to the end. These ships were scheduled to touch at each garrison two or three times a month; the sick and wounded were then sent to the civil and military hospitals in Sicily, Naples, and Tuscany.

During the war 23,921 sick and 2,802 wounded were sent to Italy.

Necessary numbers of horses, mules, and carts were furnished. Camels were used for transportation into the interior; 300 auto-wagons were also used, which gave proof that this system of transportation is an excellent one and can be used in a country devoid of roads. Railroad material was furnished, and was used on roads that had been constructed or were completed by us. An enormous amount (60,000 tons) of building material was furnished for civil and military work.

The Quartermaster's Department coöperated efficiently with all civil and military operations during the year of



TRIPOLL.—Photograph Taken from a Dirigible at an Altitude of 400 Meters.



Photograph Taken from alDirigible at an Altitude of 100 Meters.



war; constantly inspiring the command by the fact that at no time was there any anxiety lest the troops should lack proper requirements.

### THE ARTILLEY.

In the shortest time, and with unfavorable conditions at sea, we were able to land numerous field and mountain guns and a great supply of matériel; to get rapidly into action, and to overcome difficulties in transportation not light, owing to the nature of the sandy and hilly soil, or because of rain. Even the artillery of medium caliber (guns 149-6-inch and mortars 210-8-inch) was rapidly landed and transported with only ud mentary means across muddy ways to arm the batteries. Magazines were constructed, and a great quantity of ammunition and explosives were stored; repair shops were built for artillery and wagon accessories, and reserve dépôts conttructed for matériel, arms, and ammunition (our own and that captured from the enemy). This labor was extremely difficult when dealing with the temperature and the fine sandy soil in which they worked. The workers had to understand the duties of gunsmiths, mechanics, armorers, carpenters, saddlers, plumbers, etc. Repair shops were set up for small arms, harness, bicycles, stoves and pots, telephone apparatus, tents, sappers' tools, pumps, etc. The workshops of Tripoli provided the needs of the smaller garrisons, made shields for the artillery (75-A, 3-inch, and 70-2, 6-inch) and mountain

guns, tall enough to protect a camel lying down and invulnerable to ordinary fire; made equipments and accessories for regular consumption, and finally the workmen constructed barracks and made roofs.

Experiments were continually going on in the artillery: substituting mules for horses; the use of a loose, springy, padded tire for the carriages; to safeguard the stowing of ammunition and powder away from the direct rays of the sun; to maintain telephone communication between batteries, spotters, and battery commanders' stations.

Finally camels were substituted as the leading hauling power for the artillery, for the following logical, economical, and tactical reasons: they withstood the long marches without fatigue; they could be fed from local pastures, and could go several days without drinking; they would lie down during action, offering a small target, and are insensible to fire; they are easily guided and watched, cost less than other quadrupeds, are fed at a small cost, and, finally, do not suffer from the extreme heat.

### ENGINEER CORPS.

This corps also had its chance to distinguish itself, overcoming, with few resources, all climatic obstacles and the enemy who opposed its work; starting this work by building landing docks with alacrity.

The troops of this corps greatly helped the other branches of the service with the perfection of their first defenses as well as the succeeding ones, and in the clearings for an open field of view and fire, and a line of communications. They took part in all the combats with admirable spirit and sacrifice, without any saving of fatigue or blood.

Their work can be judged by the result. The sappers built all works on the coast occupied by us, and in the zone of Tripoli alone the intrenchments were 20 kilometers (14 miles) long, constructed with every care to render them safe and healthy. They also constructed various batteries, field redoubts, and semi-permanent trenches, and about 600,000 yards of accessory defenses, and cleared the field of fire in the oases, difficult and treacherous because of the impenetrable mud-holes, thick vegetation, and palm trees.

The engineers did not omit anything that would assist them in gaining their ends or material, with the idea in view of adapting themselves to any exigency that would arise from the condition of the terrain or the mode of combat of the enemy. They became so skilled in their work that in a few hours after a combat and conquest they could erect defensive positions that would withstand any sort of attack from the enemy.

Normal barracks and tents were modified to meet the requirements of the climate and ground. Barracks were constructed so that all hydraulic and hygienic measures were considered, and all sorts of mechanical contrivances were used to obtain water from the wells.

This corps were also actively engaged in starting a telegraph and telephone system. At Tobruk they

stretched a telephone net of 40 kilometers (26 miles), using about 60 kilometers (40 miles) of wire, partly on poles, partly underground, partly flying; at Bengasi the telegraph and telephone line reached 132 kilometers (88 miles); at Tripoli 195 kilometers (130 miles) of permanent telegraph line was installed, partly underground and partly on poles; 40 kilometers (26 miles) of telephone; 50 telegraphic, 50 telephonic, and 12 signal stations, producing daily 2,000 despatches. Installations of minor character were made at other garrisons.

At the same time with the telegraph, the radio-telegraph was brilliantly justified. On the 14th of October, Tripoli was communicating with the Navy, continuing in this way to maintain rapid transmission, contributing to that mutual and perfect coöperation between Army and Navy which has been largely dealt with all through this report. By November, Tripoli, Homs, Lampedusa, and Vittoria were connected up; after the visit of Mr. Marconi, and on his advice, eight stations were erected; 31,000 radio-telegrams were sent, showing the importance of this system in warfare. Various experiments were made in using mules and camels as the means of transporting wireless equipment.

The use of the dirigible *Drachen* was important. It was used by spotters both at sea and ashore to watch the effect of our fire upon the enemy. At sea the dirigible was tendered by a specially fitted ship. The spotters in the dirigible were able to watch the effect of our fire in the



DERNA.—A Section of the Line of Security.



TRIPOLI.—A Street.



TRIPOLI.—A Street in the Cavalry Barracks.



 $TRIPOLI.-\!\!-\!Bake shop.$ 

density of the oases, and at night, by the use of searchlight, they were able to locate the enemy.

In long-distance reconnaissances both dirigibles and aëroplanes were used.

The first flight was made at Tripoli on October 22, 1911; later, flights were made at Bengasi (November, 1911), Tobruk (December, 1911), and at Derna, Ferua, and Zuara (in March, April, and August, 1911, respectively). The two airships P2 and P3 were launched at Tripoli in March from the only hangar, as the other hangar had been destroyed by a hurricane December 16th. The first ascension was made March 5, 1911, and later with such frequency as the weather conditions permitted.

During the period of hostilities ninety ascensions were made. Both ships made flights simultaneously, in order that they might render each other assistance in case of accident.

At Bengasi the dirigible P<sub>I</sub> arrived the 11th of May, 1912, and remained until the 15th of July, making nine ascensions.

Explorative and offensive reconnaissances were made by both aëroplanes and dirigibles. The observers in the aëroplanes followed the traffic to ascertain the destination and source of provisions furnished to the enemy, discovered the oases occupied by them, and located their defenses, the camps of the Turks and the Arabs, with their dépôts, etc.

The offensive flights were accomplished by dropping bombs on the enemy.

Unfortunately, the weather conditions did not always permit flights during action. The dropping of bombs, while they did no material damage, had a wonderful moral effect. Our troops were the first in the world to use this method of offense. Excellent photographs were also taken by the air squad, which were highly important to our intelligence department and for the compilation of maps.

The aërial navigation and aviation rendered excellent service, reporting the character of the ground and taking particular observations, especially in Tripoli. They facilitated work, which would have been hard to accomplish in an ordinary theater of war, in mountainous country, rich with vegetation and natural obstacles, and against an enemy furnished with arms capable of hitting the bird-men. The value of this experiment, which Italy had the fortune to effect for the first time in history, will furnish a treasure for the future.

To return to the works, the systematizing of the bases, and the special study and work required to make them a definite assest: Works of a permanent character were constructed, and a line of security to guarantee the safety of the bases from the depredations of a possible massattack of the Arabs, who, regardless of consequences, would probably have tried to enter the city; a wall of masonry high enough to prevent surprise was built.

With limited means at hand, there was commenced the construction of barracks, offices, and magazines, and foundations were laid for hospitals. Dépôts and store-



TRIPOLI.—Magazines.



TRIPOLI.—Water Department.



TRIPOLI.—Auto-Wagons.



TRIPOLI.—Camel Corral.

rooms for merchandise, ammunition, and matériel, ovens and foundries, reservoirs to insure the retention of water, with sterilizers and pumps with motor power, were installed.

## SANITARY SERVICE.

The Sanitary Corps and the Red Cross rapidly installed their respective establishments, perfecting them, as conditions required, to meet the climate, the troops, and the surroundings, so that the care of the sick and wounded was facilitated. They improved the antique military hospitals of the Turks, and erected several convalescence wards for the complete recovery of those discharged from the sick wards before sending them to duty.

The sickness that predominated was of an intestinal character, and in the rainy season rheumatism. The daily proportion of sick varied between a minimum of 1.30 in the month of March and a maximum of 2.10 in the month of October, for each 1,000 men. The general health of the troops was very satisfactory; and the sanitary corps were present in every combat, giving first aid, and at times resorting to arms to defend the hospital from the barbarous aggressors. The manner in which they fought and stamped out the epidemic of cholera amongst the inhabitants, which, if it had broken out in the ranks, probably would have resulted in compromising the enterprise, is a matter which cannot be exaggerated.

How the Sanitary Corps assisted the civil authorities in this will be succinctly told in a following chapter.

### COMMISSARY DEPARTMENT.

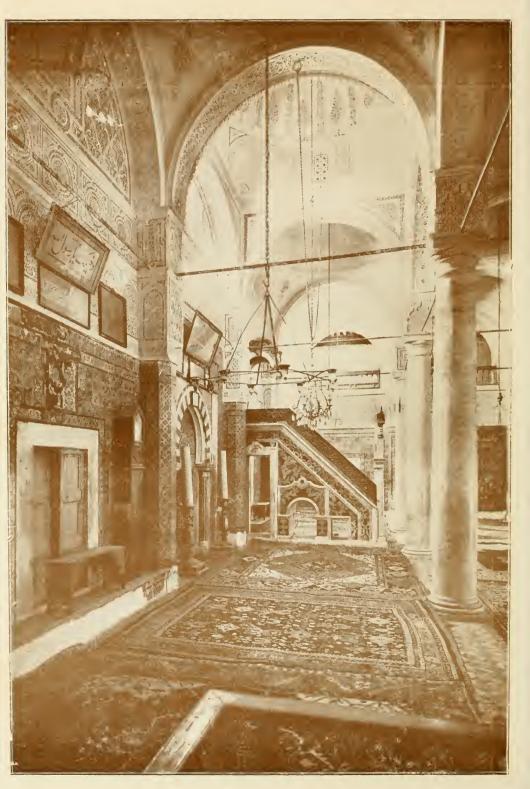
The organization of this department was perfect from the first days of our occupation, and maintained throughout the whole campaign. Difficulties of landing stores, owing to heavy seas, and the many adverse obstacles which are contended with when a rapid collection and distribution of merchandise and matériel is made, were overcome, due to the intelligence and to the inexhaustible spirit of abnegation demonstrated by the personnel, and again in the last days of October, in Tripoli, by the sacrifice of blood.

Although the provisions had been a long time on board and then on beaches and landings, conglomerated with matériel of all descriptions, and lacking the proper means of cover from the intemperate weather, yet they were able to furnish the troops with fresh provisions and bread in good condition, during action and at points distant from the dépôt of supplies.

Little by little conditions were perfected. During the first few days bread was made on board the ships; then the field ovens were used, and finally the brick ovens abandoned by the Turks, which were partly reconstructed. Successively store-rooms were built for the daily and reserve provisions. The transportation of stores was facilitated by constructing railroads, when those captured did not answer. Branch subsistence dépots were established in the vast zone of Tripoli at Ain Zara, Tagiura, Gargaresc, Fornaci, Trik Taruna, Sidi Ab-



TRIPOLI.—Mosque of the Caramanli.



TRIPOLI.—Interior of Mosque of the Caramanli.

dul-Gelil, Gheran; with brick ovens at Ain Zara, Tagiura, and Sidi Abdul-Gelil.

Experiments were made at all the bases relative to the subsistence of men and animals, and the rations were varied and increased daily.

As has been stated, the special difficulties experienced in the beginning of the campaign did not have any effect on the troops, but to obtain this result it took a considerable amount of energy to meet their wants. At Tripoli, for instance, there were distributed during the year of war 12,600,000 rations, with an average of 34,000 rations daily; 10,000 horses and mules, 3,000 camels, and 1,500 head of cattle consumed 1,200 cwt. of hay and 1,000 cwt. of oats and barley; 260,000 cwt. of wood, with a daily average of 800 cwt., was also consumed.

At Bengasi, during the campaign, 4,500,000 rations, with a daily average of 13,000 rations, were issued; 6,500 head of cattle were slaughtered, and there was a daily consumption of 200 cwt. of wood, 140 cwt. of oats and barley, and 320 cwt. of hay and straw.

Analogous in proportion were the other issues of the commissariat—those of uniforms, equipment, and pay; and not everything was obtained from the mother country, but, where possible, from local sources, thereby causing the resumption of activities in market and industries, large and small.

### TRANSPORTATION.

The enormity of the work attached to the construction

of bases and the landing of stores called into service land transportation.

The work was arduous, owing to the scarcity of floats, lighters, tug-boats, and wharves, and the continuous heavy seas; add to this the large number of troops of each arm, matériel of all sorts, quadrupeds, cannon and their carriages, which had to be landed with that urgency which the warlike exigencies demanded.

Finally new lighters were collected and wharves and landing-stages were constructed by military and private concerns. These things, however, preoccupied the regular functions of this service; yet the troops did not in any way suffer, nor did the necessities, for use on the field of action, thanks to the activities of this corps.

The land transportation assumed vast proportions from the outset. The difficulties attending the landing of stores in restricted spaces necessarily caused some confusion of merchandise and matériel, which later had to be sorted and then sent to the dépôts and organizations and to the troops on the firing-line.

It was necessary to establish a vigorous and active organization, always prepared to meet, not only the ordinary demands, but also those arising from unforeseen circumstances, as well as to be ready to meet the requirements of whatever expedition the military situation required, going a long distance from the base and into an inhospitable country.

As soon as Tripoli was occupied, the idea occurred to experiment with auto-trucks; this was done successfully

and at nearly all points occupied, but naturally 160 out of the 300 sent to Libya were used in the zone of Tripoli, owing to the extent of operations.

This new method of transportation resulted in the rapid clearing of the wharves and transmitting the stores to the troops, transporting construction materials, removal of camp equipage, and carrying ammunition and rations to the firing-line. We therefore had ample proof from this complex work—the long daily trips made over desert and variable ground—that inspired complete faith in this mode of transportation to follow the troops, under any circumstances and for long distances, with great saving of time and fatigue, besides the ordinary services required by the presence of many troops on a warlike mission.

### VETERINARY SERVICE.

The hygienic and sanitary conditions of the quadrupeds were always excellent, as were their nutrition and suitability, notwithstanding the long and hard marches, the prolonged stay aboard vessels, the climate, and the heavy work.

There were, especially in Tripoli, several cases of infectious diseases, provoked by the inevitable contact with native animals. Energetic measures were taken to combat these diseases and to provide means to insure vigilant care of the animals. Thus the spread was not only prevented, but stamped out, by the active work and the intelligent care of the veterinary surgeons.

### POSTAL SERVICE.

The difficulty of a convenient system and the quantity of work, from the first moment, caused by the large number of troops and their consequent manifold relations with the mother country, confronted this service at the initiation of the campaign; it became more complicated, owing to the irregularities in the arrivals and departures of the postal vessels, caused by the conditions of the seas, and the continuous augmenting of the forces of the corps of occupation, the unexpected change of detail of troops in the various zones, the numerous departures for Italy, and the substitutions therefor.

A patient, dutiful, and devoted personnel faced all these difficulties with a true spirit of abnegation.

To facilitate the correspondence of the troops with their families and *vice versa*, in a manner suitable even for those who knew only how to sign their names, a special post card was issued, on which an appropriate phrase was printed, which was distributed gratuitously. The Minister of Posts (Postmaster General) also provided the troops gratuitously with thousands of post cards, larger than the regular size, and envelopes. The troops were allowed to frank all mail.



Construction of a Wharf.



MACABEZ.—Constructing a Dam across the Bay.



TRIPOLI.—Wharfs.

### CHAPTER IV.

THE CIVIL ADMINISTRATION AND ITS POLICY.

The activity of the service had civil as well as military dealings with the natives, and laid the foundation for a progress which we intended to introduce into a land that had long remained abandoned.

The consequent result was a vast and complex work, and, given the state of war, had to be proceeded with gradually and effectually.

With just foresight, it was desirous of developing a policy which would conduce to an effectual affirmation of our sovereignty over all Libya in the briefest time and with as little loss of blood as possible. This would tend to reduce the inevitable rancor originated by the war and to establish a sure and cordial support.

To instill the proper spirit in the Arabs, they had to be coerced and at times punished in an exemplary manner, to obtain respect for and fear of our power; they were convinced by continuous proof of our desire to introduce into their country a new era of good-will and prosperity, respecting their beliefs, their customs, and traditions.

The military authorities initiated this alone. The men, directed by the officers, carried on this work during the first few months of the war, but immediately afterwards, especially in Tripoli, they received the intelligent assistance of the civil authorities sent from Italy to colonize Libya.

The dual activity of the civil and military authorities, who were in complete and cordial accord, netted the results which were arrived at in a few months and that were especially notable in the principal centers.

### LANDING-PLACES.

As has been stated, the first and probably the gravest difficulties that were encountered were the absence of landing-places for our troops on the coast of Libya (beaten frequently by violent seas) and the absence of harbor facilities.

Work was immediately begun to improve the harbors and systematize in the best manner possible the anchorages; to construct landing-places, wharves, store-houses, and cranes for the rapid landing of stores. Excavations were also made; and at Macabez a canal was dug to a depth of  $4\frac{1}{2}$  feet, allowing the passage of small craft.

Naturally, the major portion of this work was done in the two principal ports, Tripoli and Bengasi. The wharves here were more substantial, larger and longer, and the cranes heavier. Tracks were laid on the wharves, and the merchandise transferred to the store-houses or to the main railroad line by train.

### SURVEY.

It was essential, for military purposes, to know the



TRIPOLI.—A Breakwater under Construction.



TOBRUK.—Auda Valley.



TRIPOLI.—Railway Station.



RHODES.—Mount Smith.

topography of Libya. We had approximate and incomplete knowledge of the surrounding country, especially of Cyrenaica, which was not widely traveled. A commission from the Military Geographic Institute, from the first days of the occupation, began at Tripoli a study of the geodetic and topographical conditions, and promptly turned out maps of Libya on various scales and of sufficient accuracy, in spite of the insufficient methods of reproduction.

### ROADS, STREETS, AND RAILWAYS.

The roads, even in the proximity of the inhabited centers, were deficient and in some places obsolete or reduced to broken paths.

This was the case at Derna. When the communications between the littoral and the higher plane were difficult, at first paths were made, then transformed into trails, and finally into roads for wagon-travel. In some places the road-building was difficult, and in one place we cut through rock for 2,500 meters (2,735 yards). Arriving on the higher plane, the work became easier, and roads were built connecting Marabutto, Sidi Abdallah, and Segnale on one side, and Kasr Ras el Leben and Casa Aronne on the other. The first road, when completed, would reach Ain Mara, and the second would become the principal communication towards Mantuba and Bomba.

Along the shore and the wider roads of the plain narrow-gauge railroads were laid and animal power used, principally to carry water. An aërial cable 300 meters (310 yards) long was stretched across the valley of Giaraba, to which a car capable of carrying 200 kilograms (450 pounds) was attached, so that a haul up and down the mountain-side was saved.

At Bengasi the work of road-building was not as difficult as at Derna. A road was built from Bengasi to Giuliana (a drawbridge was built across the Sibback); to the oasis of Foeyat (where the water was potable); to Sabri and the various field-works. On this road narrowgauge tracks were laid, facilitating the hauling of water, and so forth.

At Tobruk, where the ground was rough and broken, a number of difficulties had to be overcome. However, 21 kilometers (14 miles) of roads were built, which could be used by auto-trucks, with a view to the future use by the towns, connecting them with the caravan trails of Solum and Derna.

In the other garrisons of Libya secondary roads were built to meet the immediate requirements of the troops.

At Tripoli, however, from the first days of our occupation, a narrow-gauge track was laid connecting the wharves with magazines and warehouses, and, with a view towards operations into the interior and the future railroad of Libya, 60 kilometers (40 miles) of tracks were requisitioned from Italy and laid.

In March, 1912, railroads connected Tripoli with Ain Zara; in April, with Gargaresc; and from this line ran a spur connecting with the quarries, for the transport of stone used in construction. In July the railroad from



Fountain at Zanzur, Constructed by Soldiers.



Reservoir at Bu Meliana.



Panorama of Misurata.



A Water Main at Derna.

Tripoli to Tagiura was completed, and in the beginning of September the tracks were extended from Gargaresc to Zanzur.

In the meantime a central dépôt and also one of departure were erected in Tripoli, with all the necessary appliances and offices.

At the declaration of peace 60 kilometers (40 miles) of tracks were laid, and in operation there were 4 locomotives, I train of first- and I of third-class coaches, I2 tank cars, 62 box and flat cars, and I2 armored cars.

Even in the Ægean, roads were constructed. On the island of Rhodes, from Rhodes to Kum-Barnu Trianta to Fanès (a road for auto-trucks), from Rhodes to the fountains of Rodino to Kalitheas, 12 kilometers (18 miles). Another road 3 meters (3½ yards) wide was paved from the Bay of Trianta to Mount Smith, and then down into Rhodes. It was the ancient road of Cavaliere, which had been reduced to a path in spite of its being the most direct communication between Trianta and Rhodes. This work, finished in October, was long and tedious, the bridges and retaining-walls having to be repaired or rebuilt.

At Leros the detachment stationed there repaired the road from Partheni to S. Marina for a length of 5 kilometers ( $3\frac{1}{2}$  miles).

### TELEGRAPH AND TELEPHONE.

As has been stated in the report of the Engineer Corps, the telegraphic, telephonic, and radio-telegraphic communication installed by them, for immediate military purposes, was only the forerunner of an extensive net to be established and that would prove its value in the colony.

### WATER MAINS.

The water problem was one of the gravest faced during the war. It has been seen how in the beginning water had to be sent from Italy, and later how wells were dug and water sterilized for drinking purposes.

Gradually this problem was solved, and water was furnished for the inhabitants as well as the troops.

Little could be done around Bu Chemesc, because the water was brackish; and after digging 100 meters (108) yards) and not finding fresh water, this project was abandoned.

In the peninsula of Macabez the water was fresh, but did not reach to a great depth.

At Tripoli the sources of Bu Meliana were cleaned out and the existing mains were renovated; but the flow of water was insufficient when the inhabitants abandoned the use of the wells. Work is in progress laying mains from Hamidiè to provide water for Hara, Sciara Sciat, and other quarters in that zone.

At Misurata water mains and a power-plant were established, getting water from the wells of Mangush, 18 meters (20 yards) deep, 1 kilometer (1,094 yards) distant.

At Bengasi plans are laid to get water from the wells of Foeyat and to construct a reservoir of 200,000 liters (40,000 gallons).

At Derna the best water exists. Before our occupation the city was furnished by wells and two uncovered aqueducts, which ran along the valley of Derna; the one on the right called the Seghia, 5 kilometers (3½ miles) from the city and 53 meters (57 yards) above the sea level; the other, on the left, called Bu Mansur; both from distant sources not yet located. From the first days of our occupation this latter aqueduct was destroyed by the Arab-Turks, but the remaining one furnished enough water for our use. To prevent the destruction of this one, the valley was dammed and the water was obtained through an iron pipe leading from this wall.

The few wells and sources at Tobruk furnished brackish water, but the bad results were negative. It is expected that good water will soon be located further inland.

### SANITARY AND HYGIENIC MEASURES.

The sanitary conditions of the natives were bad, owing to the lack of hygienic and curative measures. They were provided, gratuitously in all the garrisons, with dispensaries, either detached or in the military hospitals, and even in the regimental infirmaries.

The natives, at first diffident, finally began to report for treatment in great numbers and with faith. At Homs from 15 to 20 per day at first reported, and finally from 60 to 80; at Misurata, from June to October, 5,000 sick were cared for; and at Bengasi, during the year of the war, 32,507.

At Rhodes the civil and marine hospital services were in a position to attend to all the wants.

In Tripoli this free treatment had to be reinforced, the cholera having broken out among the natives just before we landed.

The first steps taken were to isolate and stamp out this epidemic. The military sanitary corps worked with great intelligence and abnegation, first alone and then in conjunction with the civil sanitary corps. Notwithstanding the gravest difficulties experienced—the scarcity of potable water, the filth in the houses and streets, and insufficient and unsuitable means to cope with this disease, they managed to eliminate the cholera in a brief space of time.

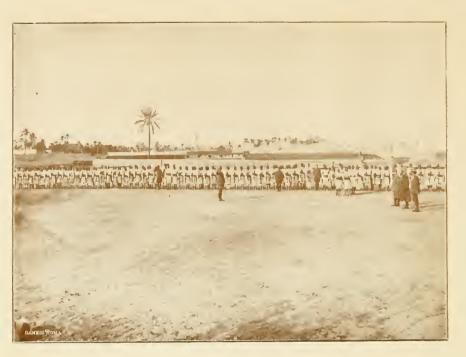
The peril from cholera having diminished, the sanitary personnel immediately began to organize. They installed two laboratories, one chemical and one bacteriological, with all the means and instruments necessary to carry on their respective work. They could therefore perform and render the same service as any laboratory in the mother country. To prevent contagious diseases and to rapidly stamp them out in case they manifested themselves, a quarantine station was established in all the ports; the one in Tripoli being the most important, as this port was used by the pilgrims to and from Mecca. In case of an epidemic, those afflicted were isolated outside of the city in a hospital of 150 beds. Illness of a minor character was taken care of in the regular hospitals. The laboratory Baccelli, created by the Minister



View of Headquarters and Review of Troops.



BENGASI .- Fort at Piemonte.



A Company of Colonials.



Orphans at Exercise.

of Foreign Affairs for research before our occupation, with its four specialists, did excellent and conspicuous work in ophthalmia and diseases of the ear, nose, and throat.

To organize and better the sanitary and hygienic conditions of the natives, doctors were detailed to live in the various quarters, to see that decrees relative to sanitation were being carried out, and to give medical aid.

### VARIOUS SERVICES.

The synthetic character of this writing does not allow the space these services merit, but will be explained in brief.

Customs and tariff were imposed or reduced, care being taken not to alarm the commerce of the neutral nations; keeping account of the local exigencies, and not preventing the liberal development of industry, combating, moreover, the excessive use of alcoholic drinks.

The port officials regulated the harbor police, fishingboats, maritime rights and sanitation, pilots, landings, and departures.

Steps were taken to protect and till the tobacco plantations and promote the growth of Fezzan and Tripolitan tobacco.

The municipal and federal establishments were rehabilitated, having been left by the Turks in complete abandon. Civil jails and prisons were constructed, electric lights and cars installed, streets paved, and local and suburban police organized.

At Tripoli an orphan asylum was established, where the children were maintained and educated. Steps were taken to assist the poor, who had become more numerous, due to the misery of the war.

The Exchange was organized; illicit speculations, excessive loans from banks, illegal acquirement of land, and the cutting down of palms prevented.

Steps were taken to repopulate and cultivate the oases, with pecuniary encouragement and protection against marauders, who were a menace to all isolated grounds, and to institute agricultural credit. Excellent silk is raised on the experimental farms established.

Italian schools were opened as soon as possible.

In the interests of archæology, the old Roman ruins around Libya are being excavated under the supervision of experts.

The service of the police was at first rendered by the Carabiniere (Italian Royal Police), then by natives under their supervision.

The courts of justice were in the beginning all military. Later, a civil tribunal and an appellate court were instituted in Tripoli.

Our good intentions were demonstrated to the Arabs, relative to the new colony, and the comparison made between the old and new régime, the removal of the squalor, and our respect for their traditions, customs, and religious beliefs by distributing lambs for their rites, and repairing the mosques that had been damaged by shells. Flour was furnished gratuitously and periodically, money was



Orphans at School.



Orphans at Drill.



Olive Trees at Misurata—Shoemakers in the Shade.



TRIPOLI.—Drilling Recruits.

given for repair of houses and wells, and work-animals loaned. Treaties were made with the chiefs, and they were given administrative rights and power over their tribes. As it was difficult to get into direct communication with the Arabs, owing to the vigilance exercised by the Turks over our emissaries, proclamations in Arabic were dropped from dirigibles and aëroplanes into Arab camps.

The Arabs had been and were kept in the dark by the Turks as to the developments of the campaign, our victories, our intentions, and our form of government, in the whole theater of war.

### CONCLUSION.

Our recent war, due to the condition of the terrain, resources, and climate of the hostile country, was complex and difficult. The work completed by Italy, by means of its Army and Navy and supported by public enthusiasm, can be said to be truly unique.

The accurate and sagacious work of military preparation, the valor displayed in combat, and for the fruitful civil rights established in our antique Roman colony, is destined, under the activity of our people, to be given a new and religious life.

His Majesty the King issued the following order:

"ORDER OF THE DAY TO THE ARMY AND NAVY.

"S. Rossorc, 29th October, 1912.

"In the solemn proof, to which Italy was called by her

new destinies, the Army and Navy have worthily accomplished their proper duty.

"They were put to the test on land and sea, and were found prepared, ably directed by chiefs, and valorous in combat. The happy result was merited and was a consequence of the activity and intelligent coöperation of all, the abnegation, the calm patience with which the perils and discomforts were serenely confronted, the sacrifice of noble lives with enthusiastic loyalty devoted to their country.

"Glory to those who fell for the grandeur of Italy.

"To the Army and Navy, who fraternally united in this arduous enterprise and worthily impersonated the national conscience, falls the warmest expression of my most heartfelt gratitude and the loyal applause of a grateful country."

On the 19th of January, 1913, the troops passed in review before His Majesty; the flags of all the corps were then escorted to the monument of Vittorio Emanuele II., "The Altar of the Country," and decorated by the King.



Arab Prisoners.



King of Italy Decorating the Colors.



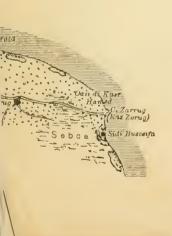
# LITANIA

: 1.500.000



## MISURATA

Scala appr 1:250.000



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