THE ROYAL ENGINEERS JOURNAL.

Vol. XXIII. No. 1.



JANUARY, 1916.

19

1. A Simple Planimeter. By Capt, H. W. HERRING, R.E. g. The Modern Development of Water Power. By Alphonse Steiger, M. INST. C. E. Sieges and the Defence of Fortified Places by the British and Indian Armies in the XIXth Century (continued). By Col. Sir EDWARD T. THACKERAY, v.c., K.C. S., late R.F. : Capture of Kabul, 1879 5 4. Corps Archeologia: - The Corps of Engineers, Ireland. By Major J. J. CROOKS 12 16 6. Notice of Magazine :- Re: ne Militaire Snisse : Supplement "The European War": La Manœuvre Morale des Flanders—The Affair of Seissons—The Engagements in the Champagne—The Engagements in the Argonne—The Capture of les Eparges—The Battle of Neuve Chapelle. By Major W. A. J. O'MEARA, C.M.G., p.s.c., late R.E. (Barrister-at-Law of the Inner Temple)

CONTENTS.

INSTITUTION OF RE OFFICE COPY

DO NOT REMOVE

BULLIVANT & CO., Ltd.,

MAKERS OF

STEEL WIRE ROPES

FOR CRANES, LIFTS, HOISTS, WINDING and HAULING, Etc.

BULLIVANTS' Wire Rope Suspension Bridges. Specially adaptable for long spans over Rivers, combining great strength with minimum weight and cost.

BLOCKS, PULLEYS, AND ALL WIRE ROPE APPLIANCES.

Reg. 72, Mark Lane, E.C. Works: Millwall, London, E.

Telephone No.-Bast 3754 (a Lines).

Telegraphic Address: -"Constructive Ironworks.
MILLEAST, LONDON"
(3 words only chargeable).

MATTW. T. SHAW & CO., Ltd., millwall, london, E.

CONSTRUCTIONAL STEELWORK,
FRAMED BUILDINGS, BRIDGES, ROOFS, Etc.

Large Stocks of Joists, Channels, Angles, Tees, Flats, Plates, Chequers, Rounds, Squares, Rivets, Bolts, Galvanized Sheets, etc., etc.

VERY PROMPT DELIVERIES GUARANTEED.

Abbreviated Notes on MILITARY ENGINEERING.

CONTENTS.

ROPES, SPARS, TACKLES, STRENGTH OF MATERIALS.
BRIDGING. FIELD DEFENCES.

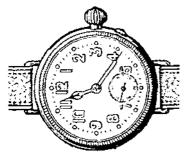
CAMPING ARRANGEMENTS, DEMOLITIONS. ROADS.

Fifth Impression just published. Now Ready.

Price 6d. per Copy, Cash with Order.

SECRETARY R.E. INSTITUTE, CHATHAM.





£3 - 3 - 0

AN OFFICER writes:

"Please send me another Military' Luminous Watch; four members of my family each have one and find it entirely satisfactory."

The Military Luminous Watch.

WITH dust and damp proof Silver Screw Case. Fully visible at night, accurately adjusted with fine lever movement, it is the most satisfactory luminous watch sold, and is unequalled for naval, military, or general use.

A Selection of chapper Luminous Watches from £2 2s.

THE

Goldsmiths & Silversmiths Company Ltd.

Only Address :

112, REGENT STREET, LONDON, W.

SOLE AGENTS for the

R.E. Institute Publications

(Institute Members excepted):

MACKAY & CO., LTD.,

CHATHAM.



Burberry Trench-Warm.

BURBERRY

WEATHERPROOF WAR KIT

"Invaluable for winter campaigning, as it ensures warmth, comfort and protection, and mitigates the risk to health of exposure to bad weather."

BURBERRY TRENCH-WARM — Supplies the services of three coats in one, each of which can be worn separately. A Weatherproof that will stand hours of rain; a light Camel Fleece Short-Warm; and a thick Overcoat for the severest weather.

UNIFORMS OF TENACE WHIPCORD A Burberry cloth of prodigious strength, made of pure botany wool. Will outwear three uniforms made of ordinary Whipcord.

THE BURBERRY—With or without Detachable Fleece lining. Keeps its wearer dry on wet days; luxuriously warm on chilly; and is healthful and comfortable to wear in mild weather.

TIELOCKEN BELTED COATS. Great Coats, British Warms, Caps, Shirts, Puttees, and every detail of Equipment.

READY FOR IMMEDIATE USE

Or made to measure in from 2 to 4 days.

MILITARY CATALOGUE POST FREE
All Genuine limberry Garments are labelled Burberrys

BURBERRYS Haymarket

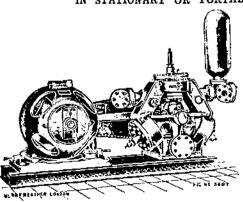
Bd. Malesherbes PARIS and Agents.

MERRYWEATHERS'

PATENT

"HATFIELD" PUMP.

IN STATIONARY OR PORTABLE FORM.



Specially adapted for working with Electric or Petrol Motor.

Constructed in several sizes.

Renowned for its great lifting powers without priming device.

> An efficient high pressure pump at low cost.

Write for particulars.

MERRYWEATHER & SONS,

IRE ENGINEERS.

GREENWICH, S.E., LONDON.

CONTENTS.

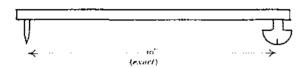
	•	PAGE.
1.	A SIMPLE PLANIMETER. By Capt. H. W. Herring, R.E	1
2.	THE MODERN DEVELOPMENT OF WATER POWER. By Alphonse Steiger, M. INST.C.E	3
з.	SIEGES AND THE DEFENCE OF FORTIFIED PLACES BY THE BRITISH AND INDIAN ARMIES IN THE XIXTH CENTURY (continued). By Col. Sir Edward T. Thackeray, v.c., K.C.B., late R.E.:	
	Capture of Kabul, 1879	5
4.	Corfs Archeologia:-	
	The Corps of Engineers, Ireland, By Major J. J. Crooks	1.2
5.	REVIEW:	
	Rivington's Notes on Building Construction. —New Edition of Parts 1 and 2, Edited by W. Noble Twelvetrees	ιό
6.	NOTICE OF MAGAZINE;-	
	Revue Militaire Suisse: Supplement "The European War": La Manicuvre Morale des Flandres— The Affair of Soissons—The Engagements in the Champagne—The Engagements in the Argonne—The Capture of les Eparges—The Battle of Neuve Chapelle. By Major W. A. J. O'Meara, c.M.G., p.s.c., late R.E. (Barrister-at-Law of the Inner Temple)	-

A SIMPLE PLANIMETER.

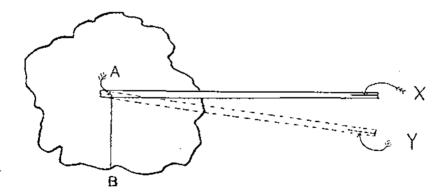
By CAPT. H. W. HERRING, R.E.

THE following is a description of a simple form of planimeter which might be of use to officers as it can readily be made with materials to hand.

The instrument consists of a pointer rigidly connected by a bar to a curved knife edge, edge and point in the same line; a nail would do for the one and the end of a table knife for the other, 10 in. between the two is a convenient length.



To ascertain the area of any irregular figure proceed as follows :-



- 1. Choose a point A at the approximate centre of the figure.
- 2. From A draw any line AB to the side of the figure.
- 3. Place the instrument at right angles to this line, with its pointer at A, press gently above the knife edge so that it marks the paper. Call this mark X.

4. Holding the instrument above the pointer (leaving the knife edge free to move on the paper) move the pointer from A to B, round the figure and back to A; again press knife edge to mark paper. Call this mark Y.

Note the pointer must be kept vertical.

Then XY (in inches) × 10=area of figure in sq. in.

The results given are not absolutely accurate but are near enough for most practical purposes.

To anyone with leanings towards mathematics the calculation of this theoretical inaccuracy may prove an interesting problem.

Others can try it on a figure of known area.

THE MODERN DEVELOPMENT OF WATER POWER.

By Alphonse Steiger, M.Inst.c.e.

At a meeting of the Society of Engineers (Incorporated) on the 6th December a paper was read by Mr. Alphonse Steiger, M.INST.C.E., in which it was stated that the modern development of water power, mainly due to the extensive use of electrical energy for a variety of purposes, has brought about a complete change in the construction of turbines and their size, turbines now being in use which give as much as 20,000 B.H.P. The total capital invested in hydraulic power undertakings is now probably over £500,000,000.

The available power in Great Britain is variously estimated at from 500,000 to 1,000,000 H.P. To develop that power by steam would require 2,410,000 tons of coal per annum, and the value of that coal at 10s. per ton would represent the interest at 5 per cent. of a capital of £24,100,000.

Water power is, to a certain extent, dependent on meteorological and topographical conditions, and a certain regularity may be obtained by afforestation and by storage, such as is provided for irrigation purposes. Schemes are now being carried out or contemplated to make large, swift rivers navigable and to afford large power plants destined to form industrial centres in the future.

Turbines are the most efficient of water motors. They are classified into impulse turbines and pressure turbines, represented by Pelton wheels and Francis turbines respectively, various types of which are described. The selection of a turbine does not depend on the fall alone, and in selecting a turbine the efficiency under varying conditions should be carefully considered, as efficiency represents capital value. The falls so far utilized range from 2 ft. up to 5,000 ft., and a Pelton wheel is described utilizing a fall of 2,800 ft.

The governing of turbines has been completely revolutionized owing to the requirements for generating electricity, and has been brought to a high state of perfection. The prompt action of the modern hydraulic governor calls for special devices for the protection of pipe lines against bursting owing to water-hammer, and an ingenious mechanism is shown whereby that danger is prevented without any waste of water.

The paper further deals with the cost of power. Not the capital outlay, but the annual expense of a power-generating plant should

be the deciding factor. A comparison of the annual costs of various sources of power is given, showing that these costs are less in the case of a water-power plant, even if the capital expenditure on it has been greater than that of a steam plant of the same power. With a good load-factor a larger capital outlay for a water-power plant is admissible, and such plants with auxiliary steam power to make up for shortness of the water supply in the dry season are remunerative. An instance is mentioned where the power for a heavy day-load is supplemented by pumping water at night time to a reservoir which is used during day time.

Water power has become of such importance in recent years that a State monopoly has been considered in some countries. Some protection against injudicious use of water for one purpose to the detriment of others is necessary in order to facilitate the development of water power where it benefits the population of a district.

The purchaser of a turbine should ask for a definite guarantee of efficiency of the turbine he proposes to buy, not of the power, and, where the conditions of water supply vary, of the efficiency under a diminished water supply. The paper states how the claims should be formulated to prevent disputes or lawsuits.

In the concluding pages the method of testing turbines and the various operations necessary for testing turbines were described, and it was shown that a great difference in the results may be obtained by inaccuracy or carelessness in the measurements of water.

SIEGES AND THE DEFENCE OF FORTIFIED PLACES BY THE BRITISH AND INDIAN ARMIES IN THE XIXth CENTURY.

(Continued).

By Colonel Sir Edward T. Thackeray, v.c., k.c.b. (late R.E.).

CAPTURE OF KABUL, 1879.

After the massacre of the Resident, Sir Louis Cavagnari, with the greater part of his escort at Kabul on September 3rd, 1879, orders were immediately issued for a new advance on that city and for the retention of Kandahar.

It was decided that the movement on Kabul should be made by the Kurum Column under the command of General Sir Frederick Roberts (afterwards Field Marshal Earl Roberts, v.c., o.m., G.C.B., G.C.S.I., etc.). General Roberts who at the time was at Simla hurried down to reassume command of the force, and reached Alikhel on the 12th September. The column which numbered about 6,000 fighting men, began the advance the following day, and after defeating the enemy at Charasiab, entered Kabul on the 8th October. Engineers at once set to work to repair the fortifications. Sherpur Cantonment had to be repaired, its defences improved, and its accommodation remodelled. The Chief Engineer with the force was Colonel Æneas Perkins, c.B., R.E. (afterwards General Sir Æneas Perkins, K.C.B., Colonel Commandant, R. (Bengal) E.), an officer who had greatly distinguished himself in the Indian Mutiny, in the Bhootan War, and latterly in the Kurum Valley. The advance guard of the force had reached the Shutargurden as early as the 11th September. Lieut. Nugent, R.E.,* was with this force, and he immediately began entrenching the position with the 23rd Pioneers.

The Bala Hissar had also to be made fit for occupation by troops. Among the public buildings in Kabul, the Bala Hissar or Citadel claimed the first importance, but not from its strength. Kabul is enclosed to the south and west by high rocky hills, and at the eastern extremity of these the Bala Hissar which commands the city, is situated. There was another fort under it, also called the Bala

^{*} Lieut. Nugent was unfortunately killed while engaged in blowing up some towers near Kabul on the 23rd December, 1879, owing to a defective fuse.

Hissar. It was a poor, irregular and dilapidated fortification. The upper fort is small, but that below will contain about 5,000 people. The Bala Hissar was built by different princes of the House of Timur, from Baber downwards. Aurungzeb prepared extensive vaults under it to defend his treasures.

A new line of communication had also to be opened out, the Shuturgurden Pass, by which the advance had been made, being blocked with snow in the winter. The new line of communication with Kabul from Peshawur by the Khyber Pass was adopted and the route by the Shuturgurden was abandoned.

The streets of Kabul City are narrow, and the houses built with flat roofs. To many of the better sort of private dwellings there were gardens. The town is situated in a gorge between two lofty hills, up and along whose steep and rocky ridges a long line of massive wall is discernible, with numerous half-ruined towers, once forming an imposing barrier of defence against the sudden and devastating inroads of the western tribes.

The largest portion of the city stands on the right bank of the river, the opposite side being principally lined with walled gardens and small forts. The covered bazaar consisted of five open squares connected by four arcades, down the centre of which a marble aqueduct conveyed a small running stream, the sides being lined with shops. The great Bazaar or Chunhut, an arcade nearly 600 ft. long, and about 30 ft. broad, was divided into four equal parts, the streets being intersected with small covered aqueducts of clear water, a great convenience to the people. Kabul was a compactly-built city, but the houses had no pretension to elegance. They were constructed of sun-dried bricks and wood, and few of them were more than two stories high. It was thickly peopled, the population being about 60,000. The Kabul River flows through the city. There could not be a dirtier place in rain.

At the period under notice signs of unrest were becoming apparent in the neighbourhood of Kabul, and by the end of the first week of December the Afghans assembled in such overwhelming numbers that General Roberts had to withdraw the outposts, and on December 14th assembled the whole of his small force within the walls of Sherpur. Entrenchments were hastily constructed to strengthen the position against the overwhelming force of the enemy. Under the direction of Colonel Perkins gun emplacements and abattis were rapidly constructed, blockhouses were built on the Bimaru Heights, walls and villages dangerously near the cantonment were blown down and levelled, and a second line of defence within the enclosure was improvised. The perimeter of the cantonment was over 4 miles, only 1½ of which were enclosed by a wall.

A scheme had been prepared by the Engineers in November for its improvement, and this was now put in hand; the northern face was formed by the Bimaru Heights on which some towers had been constructed. It was now further fortified by a line of breastwork with emplacements for guns at intervals. The north-west face was defended by a ditch and breastworks made with ammunition waggons, abattis, and wire entanglements. The eastern face, the weakest, was defended by detached buildings, and Bimaru Village was loopholed. Garden walls and villages dangerously near the cantonment were blown down and levelled. It was considered necessary to clear carefully 800 yards all round the cantonment enclosure.

In November a force was dispatched from Kabul under Brig.-General Macpherson (afterwards Lieut.-General Sir Herbert Macpherson, K.C.B.), to join hands with the Khyber Field Force that had advanced through the Khyber to Jellalabad and Gundamuk, under the command of Lieut.-General Bright. The two commanders met near Kota Sungh on the 6th November. General Macpherson's column then returned to Kabul, and General Gough's Brigade returned to Gundamuk. Detachments were left at the various posts between Gundamuk and Kabul, viz., Soorkhab, Jugdulluk Kotul, Jugdulluk, and Latabund.

On Monday, 8th December, 1879, General Roberts ordered a great divisional parade at Kabul. On the afternoon after the review (the village of Arghandi, a great centre of discontent on the direct road to Gharni having been selected for attack), Macpherson's Brigade moved into the Chardeh Valley and encamped at Killa. On the 9th the forces halted to allow General Baker (afterwards Lieut-General Sir Thomas Baker, K.C.B.) to develop his turning movement by the Logan Valley, and across the hills by Maidan. Warnings had not been wanting. The deportation of Yakoob Khan and the various tentative means for securing tranquillity, excited nothing but enmity and distrust among the tribes.

A large contingent from Kohistan was reported to be creeping round from the north to join the gathering at Arghandi. General Macpherson by a skilful manœuvre placed his brigade in the hollow of a commanding ridge, before the Kohistanis or the Arghandi columns were aware of its presence. On the guns opening fire the hostile masses dispersed, and the infantry, Sikhs on the right, English in the centre, and Goorkhas on the left, raced down the slopes towards the enemy. The affair lasted little more than an hour. The enemy's loss was between 50 and 100.

On the 11th December, Brig.-General Massey, with four horse artillery guns and four squadrons of cavalry, rode out from the camp at Killa. This was part of General Roberts' general plan for surrounding and crushing the enemy at Arghandi. General Macpherson was to push straight along by the Pughman Hills, while General Baker was to take the enemy in rear from Maidan. The

Killa Kasi, 2,000 yards off, made a good target for the first shells, but as villages and enclosures were rapidly left behind, the battery became hotly engaged. Round after round of shrapnel was hurled forward, but the enemy had taken the measure of the little force, and swept down with great determination.

Then it was that the want of a few hundred good rifles was severely felt. After 30 dismounted horsemen had in vain striven to make up for the deficiency, it became evident that a desperate effort must be made to save the honour of the day. Side by side the British and Indian Lancers dashed forward on their hopeless errand. The ground was unfitted for cavalry, and the enemy's loose formation offered no resistance to the shock. Of all the officers of the 9th Lancers who took part in that charge, but three escaped unscathed. Hearsey and Ricardo, of the 9th, and Forbes, of the 14th, were killed, and Lieut.-Colonel Cleland, 9th Lancers, was dangerously wounded, and he died of his wounds some months afterwards.

Retreat was still possible, but before a practicable roadway in the required direction was hit upon, the leading gun toppled over into a deep ditch, hopelessly blocking the passage for those that followed. Groups of troopers made charge after charge without checking the enemy's masses. At last, when the case was desperate, orders were given to the gunners to cut the traces and gallop off, thus avoiding the sacrifice of many valuable lives.

General Macpherson's infantry was pushing forward so rapidly, that with another hour's grace the guns would have been saved, and the brigade actually got within view of the field before the fighting was over. General Macpherson chased the enemy on the right up the hills for some miles, while his force was thus employed the guns were recovered. The carriages had been stripped and left lying by the enemy in their haste when captured; and Colonel Macgregor with a very small party of officers and men, collected as he went, was able to sally out and bring them back. At midnight the Guides' cavalry and infantry marched in from Seh Baba, having covered that day over 30 miles, the first of which over the Lataband Pass was by far the worst on the line.

None now knew better than General Roberts the arduous task that was before him, and that to re-establish our shaken prestige many valuable lives must be sacrified, and many desperate deeds attempted.

On the morning of the 12th December, the enemy's flag waved from the lofty Takht-i-Shah, and from a lower and more advanced peak, but the Sher Durwaza and the command of the city were in the hands of the 72nd. Part of Macpherson's force moving up early from Siah Sung, the attack began along the ridge. The base of the Takht-i-Shah was reached in the afternoon, but a murderous fire from the sides checked all further advance. About eight in the

morning of the 13th, General Baker marched out past the city with a strong brigade. He sent the o2nd Highlanders straight at the heights above Bala Hissar, telling them this was the post of honour. The gallant regiment sprang forward and carried crest after crest at the point of the bayonet. A severe fight ensued. The rabble, too, from the city commenced sharpshooting from the Bala Hissar and from the walled villages on the plain. But the fire from all these quarters was steadily quelled, and finally the Guides cavalry swept across the valley, while the 9th Lancers and the Puniab Cavalry rode along the ridge itself. The enemy stood up boldly to meet them with their rifles, but the Guides charging to the cry of "Bala Hissar," had not forgotten the massacre of September, and the enemy suffered severely. On the 14th there was again heavy fighting with severe losses on both sides, and General Roberts wisely decided upon instant concentration within the Sherpur defences. The enemy failed to press his advantage, and General Macpherson's brigade reached Sherpur without serious mishap.

General Roberts now took up a defensive position, and he chose Sherpur rather than Siah Sung, or the Bala Hissar, in virtue of a decision arrived at two months before, and not under pressure of immediate necessity. The wisdom of this change of tactics after the events of the 14th was apparent to all. Reinforcements might reasonably be expected to arrive in a week. There had been no direct defeat, but five days' marching and fighting and climbing, fasting, and watching, is a severe ordeal for any troops.

From Dch Afghan right round to Bimaru, villages and walled gardens had been left standing at a convenient distance from Sherpur. These were now occupied by the enemy. The position of the little garrison that held the Latabund Pass caused great anxiety. Communication could only be held by heliograph, and at this time the sun was much obscured by clouds.

At last the tiny intermittent flash from Latabund reached Kabul and gave the welcome message that the post was safe, and the advancing brigade under General Charles Gough (afterwards General Sir Charles Gough, v.c., G.c.B.) was expected on the 22nd.

To supply the deficiency of cavalry with General Gough's Brigade, and also to secure, if possible, the bridge over the Logar, the 12th Bengal Cavalry were ordered to make their way through the enemy's position, and to join hands with that brigade. This exploit was carried out in the most gallant and spirited manner. The bridge at the Logar was found unoccupied; but at Butkhak a regiment of Afghan regular sturned out and received the brave Sowars with volleys of musketry, so they rode on 10 miles further to Lataband without drawing rein.

The hours of Mahomed Jan's greatness were now numbered. On the 23rd December, an hour before daybreak, a clear beacon fire shone out from the Asmai Hill. Every man in Sherpur was at once at his post, for this was the signal for the long-threatened attack. The enemy collected in thousands under Bimaru, and were rapidly increasing in numbers, running in groups of 10 and 12 from one village to another.

When the direction of the main attack became evident, General Roberts was at liberty to concentrate reserves in sufficient force to roll back the most determined assault. On the other side the attack hung fire all day, never getting past the stage of a demonstration. When the first wave of the attack on Bimaru seemed spent, and before another could gather force, General Roberts sent four guns, well escorted, through the gorge in the centre of the ridge, with orders to wheel to the right and take the enemy in flank. The moment was perfectly judged. No sooner did the Afghans perceive the cavalry and guns on their flank, than they began to retire from the nearest villages, and this retreat soon became a rout. The main body made for the Pai Manar Kotul, while on either side a multitude of stragglers dotted the snow-covered fields. The mass of the fugitives escaped unscathed, but a number of stragglers were cut up by the 5th Punjab Cavalry, and others streaming back were raked by a searching fire by the 67th from the cantonment walls.

In the afternoon the two infantry brigades moving out to the east of Sherpur, blew up the towers of some of the villages that lay in the path of General Gough's advance. In performing this service the lives of Capt. Dundas, v.c., and Lieut. Nugent, two most distinguished officers of the Royal Engineers, were sacrificed owing to a defective fuze, a mine which they had prepared exploding before they could get clear.

The enemy though they made a last demonstration on Siah Sung fell back that night upon the city, disheartened and ripe for flight. Next morning there was not an armed man to be seen, and the cavalry had a 20-mile ride, in vain pursuit, without firing a shot.

Thus ended the great Jehad of Mahomed Jan and the Moolah, Mushk-i-Alam. On the 24th General Gough with his brigade marched into Sherpur.

During the occupation of Kabul the Commanding Engineer, Colonel Æneas Perkins, had under his direction the following works to complete:—10 forts, 15 detached works, 3 large trestle bridges, numerous small ones, 4,000 yards of defence, 45 miles of road, 9 posts, also quarters for 8,000 men.

The operations carried out by the Khyber Field Force under General Bright, and by the 1st Brigade under General Charles Gough on his advance through the passes were of an extensive, varied, and arduous nature. General Gough marched from Gundamuk on the 14th December, 1879, with the following troops:—1oth Bengal Lancers, 130 men; No. 5 Company, Sappers, 73 men; 2nd

Battalion 9th Foot, 487 men; 4th Goorkhas, 375 men. The outpost at Perwan, near the Soakhal River, was held by 157 men of the 2nd Goorkhas; 6th Company, Sappers; 4 guns Hazara Mountain Battery; 50 men of the 10th Bengal Lancers. At Jugdulluk Kotul there were the 2nd and 3rd Company, Sappers, and 40 men of the 2nd Goorkhas. Jugdulluk Fort was held by 180 men of the 2nd Goorkhas, 2 guns Hazara Mountain Battery, and 90 men of the 10th Bengal Lancers.

On General Gough's arrival at Jugdulluk the whole country seemed to have risen in arms to bar his further progress, and daily skirmishes took place between the troops escorting the convoys between Pezwan and Jugdulluk. The post at Jugdulluk Kotul commanded by Major Thackeray, v.c., R.E., was attacked on three occasions, the last being on the 23rd December when he was severely wounded, and the enemy were driven off in all these attacks. On the 21st December, after seven days' severe fighting in the passes, a large convoy bringing supplies and ammunition having arrived, General Charles Gough was in a position to advance towards Kabul. The road was covered with snow, but all difficulties were overcome. The force reached Lataband without opposition, relieving the garrison at that place, and on the 24th December General Gough's force reached Kabul.

I2 JANUARY

CORPS ARCHÆOLOGIA.

THE CORPS OF ENGINEERS, IRELAND.

WE are indebted to Major J. J. Crooks for the following interesting extracts taken from the Ordnance Records in the Public Record Office, Dublin —

LIEUTENANT-GENERAL VALLANCY.—Had been a Captain in the roth Foot Fifty years ago, (there are no Lists of the Army extant that can give the date of his first Commission) he was an Extra Engineer in Ireland previous to the year 1759. Succeeded the late Major Corneille as Major of Engineers in the year 1761, and has since continued in the Corps.

MAJOR-GENERAL TARRANT, Came into this Kingdom as an Engineer 41 years since about the year 1760, and has continued in the Corps ever since. It is believed he came from the British Corps of Engineers to the Irish when the late Marquis of Kildare was appointed Master-General of the Ordnance.

Major-General Ferrier, Came into this Country in the course of the American War sometime about the year 1778 from the Service of Portugal, was immediately appointed an Engineer with the rank of Major in the Army and has since continued in the Corps.

LIEUT.-COLONEL BROWNE, Was a Lieutenant in the 27th Foot, his first Commission in which is dated the 1st July, 1782. Was then promoted to the Captain-Lieutenancy of Engineers on the 1st October, 1789, and has since continued in the Corps.

CAPTAIN TAYLOR, Was appointed and served as Extra Engineer for some years previous to 1789, and on the formation of the Corps as it now stands was appointed First Lieutenant by Commission dated 1st April, 1796. Having succeeded to that situation from the Captain-Lieutenancy to which he had been appointed the 14th of November, 1790.

CAPTAIN-LIEUTENANT EUSTACE, Was appointed Lieutenant of Engineers 8th May, 1790, and succeeded to the Captain-Lieutenancy 1st April, 1796.

LIEUTENANT ARMIT, Was appointed the 14th November, 1783.

LIEUTENANT CORNEILLE, Was appointed an Ensign in the 39th Foot in 1791, a Lieutenant in 1793, and a Captain in the 39th in 1795. Exchanged to Half Pay and from thence was appointed to a Lieutenancy of Engineers 1st April, 1796.

COLONEL VALLANCEY'S MEMORIAL TO THE KING.

To The King.

The Memorial of Colonel Charles Vallancey, Engineer,

Most humbly sheweth

That your Memorialist is informed through the Marquis of Buckingham of your Majesty's Pleasure to reform the Corps of Engineers in Ireland whereby your Memorialist is to become Lieutenant-Colonel, but that the Chief Engineer is to retire with his Commission and to hold the same as a sine-curâ. Your Memorialist most humbly prays leave to submit the following Circumstances to your Majesty's consideration.

That the Commission of Chief carries with it a Rank and Dignity much superior to that of Lieutenant-Colonel; it gives a Seat at the Board and in Time of War has considerable Emoluments thereto annexed.

That your Memorialist has served at Home and Abroad 45 Years, that he has done the Duty of Chief Engineer of Ireland above Twenty Years without the least Emolument whatever and has seen the Commission of Chief Engineer sold over his Head four Times to inefficient Men who held it as a sine-curâ.

That your Memorialist has had the strongest Reasons to believe that on a Reform, your Memorialist would have succeeded to the Commission of Chief Engineer of Ireland and the present chief invalided on his Rank and Pay.

Your Memorialist most humbly prays that he may succeed to the said Commission of Chief with the Pay Perquisites and Emoluments equal to the Chief of Great Britain.

Which is most humbly submitted.

CHARLES VALLANCEY,

Col. Engineer.

Dublin, 25th October, 1789.

My Lord,

I am honored with your Lordship's private Information through Mr. Cooke, that it is His Majesty's Intention to convert the Corps of Engineers in Ireland into a Royal Company in which I am to be appointed Lieutenant-Colonel; but that Colonel Pigot is to preserve his Commission as Chief Engineer to be held sine-curâ.

Permit me to return your Lordship many Thanks for the very flattering manner in which you have conveyed this Intelligence to me by letter to General Pitt. I am to hope for your Lordship's forgiveness for here stating objections to this Mode of Promotion.

1st. It does not come up to the expectations I have had reason to entertain of this Promotion for 20 years past, of being Chief

Engineer of Ireland, from the repeated Promises of Chief Governors, from personal conversation with the King, from Instructions several times repeated from His Majesty to the Chief Governors to place me in that Office.

2nd. The Commission of Chief conveys a Dignity to the Office, gives a Seat at the Board, and the Emoluments in Time of War are adequate to the Office.

The Salary or Income of Chief, when I was first promised to succeed in 1766 was £1,500 a year, it was sold and reduced to £700 a year. It was afterwards reduced (because held by inefficient Men) to £365 a year, and £40 per Annum for Clerk and Draughtsman. If Colonel Pigott retires with the Commission he will take the latter Allowance from me

When your Lordship was pleased to communicate His Majesty's Intentions of promoting me sooner after your arrival in this Country, Colonel Pigott told me, he rejoiced there was a Prospect of his retiring to his satisfaction, I had reason to believe he meant a Retirement with his Rank and Pay—If he now retires as invalided, permit me to hope your Lordship will recommend that I should fill the Office of Chief, otherways the Door is open to place another (and a Junior he must be) over my Head, or Colonel Pigott with his own Interest, that of Lord Shannon and Lord Drogheda, both of whom he serves in electioneering Matters will by some Means or other sell the Employment again over my Head.

Your Lordship will be pleased to consider that this Step of Preferment, is a very serious one to me. After 45 years spent most laboriously in the Service I am to be raised to the Pinnacle of my Preferment—to a bourn beyond which I cannot go. After so many years Sérvice, and now in Rank superior to all the Engineers in His Majesty's Service (the Chief of Great Britain excepted), permit me my Lord to express my hopes that the lost Preferment would have brought with it, a Dignity and a decent Income, and that I might have been no longer the Slave, but the Director, and that I might have expected the Commission of Chief Engineer of Ireland, with a Salary little less than the same Rank brings in England.

Give me Leave to draw your Lordship's attention to the great Difference between the Pays of the Commanding Officer of the Irish Artillery and that of the Corps of Engineers. General Straton has 44 shillings a Day, an Ordnance House and Land—altogether worth £1,000 a Year. The Chief Engineer has 20 Shillings a Day and £24 a Year for a Lodging. The Duty of the Artillery Officer is amusement, pastime—the Duty of the Chief Engineer a perpetual attention and application in the Field or the Cabinet. I issued from Woolwich, went on Foreign Service and returned to Ireland, at the same Periods that Gentleman did, and I feel the Difference more sensibly.

Permit me then my Lord at the Close of a long and laberious Service, and at an advanced Age in Life, to hope your Lordship's Forgiveness for the objections here made to the Mode of Preferments your Lordship has intended, and to hope that on due Consideration of the Business, your Lordship will be so indulgent to recommend the inclosed Memorial to be laid before His Majesty by your Lordship's Brother.

I have, etc., Chas. Vallancey.

Dublin, 25th October, 1789.
MARQUIS OF BUCKINGHAM.

REVIEW.

RIVINGTON'S NOTES ON BUILDING CONSTRUCTION.

New Edition of Parts I and 2. Edited by W. Noble Twelvetrees. (Longmans, Green & Co., 39, Paternoster Row, E.C. 1915. Price, 78. 6d. per part).

Rivington's Notes on Building Construction are well known to many R.E. officers. The last edition of these notes was published in 1904. A new edition has now been published bringing Parts 1 and 2 up to date. There is a lot of new matter in these two volumes, notes on reinforced concrete, steel-framed buildings, etc., being added. Though there are no detailed calculations in these first two volumes there is sufficient information for the student to obtain a general idea of these comparatively new forms of construction.

Running through the two books by chapters :--

PART I.—Chapter I.—This chapter consists of building regulations, extracts from the London Building Act, together with various extracts from local bye-laws, etc.

Chapter 2. Sites and Foundations.—Clear short notes on ordinary house foundations with tables of safe loads on various earths, stones and brickwork. The loads on the latter are based on R.I.B.A. tests and give larger safe loads than most of the old military text-books. Pile driving and the bearing strength of piles is gone into at some length, useful formulæ being given. There are notes on reinforced concrete piles, extended base piles, sand piles, etc. A very useful chapter from an R.E. point of view.

Chapter 3. Timbering, Excavations, Shoring and Underpinning.— Much fuller notes than in the old edition with many new figures.

Chapter 4. Scaffolding.—This chapter is much enlarged, tall chimney scaffolding, ladder scaffolding, derrick gantries, etc., being illustrated, besides ordinary bricklayers' and masons' scaffolding.

Chapter 5. Centres and Moulds.—The new subject matter consists of various forms of moulds for concrete walls, reinforced concrete beams, columns, etc.

Chapters 6 and 7. Brickwork and Masonry.—The notes on the preservation of stonework are interesting.

Chapter 8. Walls, Piers and Retaining Walls.—The use of reinforced concrete in retaining walls, etc., is illustrated.

Chapter 9. Arches, Vaults and Domes.—Stone and brick arches for house construction are illustrated and explained, together with short notes on domes and vaults.

Chapter 10. Chimneys and Setting for Stoves.—The latter part of this chapter has new notes and illustrations on the setting of domestic kitchen ranges, coppers, etc., together with the setting of different forms of heating and steam generating boilers.

Chapter II. Damp and Sound Resisting Construction, Prevention of Dry Rot.—A useful chapter. The notes on the prevention and cure of

dry rot are interesting.

Chapter 12. Iron and Steelwork.—The properties of cast-iron beams and columns with a summary of their limiting proportions is given. Standard connections for steel joists and various types of steel girders are illustrated, also steel pillars, pillar bases, and pillar foundations. There are good notes on rivets and riveting.

Chapter 13. Steel Skelcton Buildings.—This chapter is entirely new, and in view of the number of W.D. buildings that are built on this

system the notes should be of use to R.E. officers.

Chapter 1.4. Reinforced Concrete.—The general theory of reinforced concrete is clearly expounded and particulars of various systems of reinforcement are illustrated. No calculations are given to show how the strength of reinforced structures is arrived at. Hints on the practical construction of R.C. buildings, proportions of the concrete, test loads, permissible deflection, etc., are concisely set forth and should be of use to those engaged in the supervision or design of reinforced concrete structures. The chapter ends with notes on reinforced brickwork and concrete block construction.

Chapter 15. Fire-Resisting Construction.—The chapter opens with a list of fire-resisting materials with short notes on their merits. Various forms of fire-resisting structures are then illustrated and explained.

Chapter 16. Carpentry.—The subject is well illustrated. All joints likely to be met with are explained. Tables showing sizes of floor timbers are given.

Chapter 17. Partitions.—Wooden partitions are illustrated together with drawings of concrete slab, reinforced plaster, terra cotta, and other types of modern partition.

PART 2.—Chapter 1. Roofs and Roofing.—Definitions of different parts of roofs are given together with a table of pitch of roofs for various materials. Permanent and dead loads on roofs are gone into with brief notes on the selection of roof forms and coverings.

Chapter 2. Timber Roofs.—Numerous illustrations of ordinary types of roof are given together with drawings of a few more complicated trusses. At the end of the chapter are tables giving sizes of roof timbers. There are illustrations of timber domes and turrets.

Chapter 3. Steel Roofs.—Various types are shown. Stress is laid on the importance of joints. Useful illustrations of these are given.

Chapter 4. Roof Coverings.—The laying of slates and tiles is gone into in detail. Notes are given on the more modern forms of roof covering, asbestos slates, reinforced asphalt, patent forms of felt roofing, corrugated steel roofing, zinc, corrugated zinc, zinc tiles, etc.

Chapter 5. Structural Plumbing.—The numerous illustrations on plumbers' work are clearly explained in the text.

Chapter 6. Joinery.—Joiners' work is fully illustrated and explained There are good illustrations of door furniture that do not appear in the old edition.

Chapter 7. Windows and Glazing.—The majority of the illustrations are new and the execution of glaziers' work is more fully gone into than in the old edition.

Chapter 8. Stairs and Staircases.

Chapter 9. Plastering.

Chapter 10. Painting and Decorating,—Paperhanging,

Chapter 11. Drainage and Sewage Disposal.

Chapter 12. Water Supply, Plumbing and Sanitation.

Chapter 13. Sanitary Fittings.

The above six chapters have been rewritten. They are well illustrated, clearly explained and brought up to date.

Chapter 14. Heating, Ventilation and Hot-Water Supply.—The merits of hot-water radiators, hot air heating, open fires, gas fires, oil stoves, electric heaters, enclosed stoves, etc., are discussed. The different methods of heating are illustrated and explained while their comparative cost is tabulated. There are numerous clear diagrams of hot-water heating systems. There are good notes on ventilation. Domestic hot-water supply is fully explained and illustrated. Hints on sizes of hot-water pipes and boilers, etc., are also given.

Chapter 15. Gas and Electric Lighting.—There are useful tables giving the intrinsic brilliance of different lights, the amount of light required in different classes of rooms, efficiency of different kinds of burners and lights, etc. There are notes on many different kinds of gas and electric burners.

Chapter 16. Gas Fitting and Electric-Light Installation.—The chapter opens with notes on various types of illuminating gas. Pipe installation is gone into, together with gas meters, gas governors, etc. The different forms of dynamo in use are illustrated. Diagrams on wiring and cable-laying are given. House service mains and branches are illustrated and explained. A useful chapter.

Chapter 17. Electric Bells, Telephones and Lightning Conductors.— There are notes on various forms of batteries and bells. The wiring for domestic bell circuits, automatic fire alarms, burgler alarms, etc., are explained. The notes on lightning conductors are useful.

Chapter 18. Fire Equipment.—Fire-fighting equipment for private houses and for large buildings is clearly and shortly explained and illustrated.

These two volumes are a great improvement on their two predecessors. The revised versions should be useful both as standard text-books and as books of reference.

Presumably Parts 3 and 4 will be shortly republished and will contain the solution of the various stress problems met with in building construction.

NOTICE OF MAGAZINE.

REVUE MILITAIRE SUISSE.

(Numbers for July, August and September, 1915).

Supplement.

THE EUROPEAN WAR.

La Manœuvre Morale des Flandres.

The critical examination of the official communiqués relating to "The European War" (vide R.E. Journal for June and September, 1915) was brought down in the part of the Supplement issued with the June number of the Revue Militaire Suisse to the events which had occurred in Flanders up to 15th November, 1914. In the part of the Supplement referred to the manœuvre morale in relation to the tactical aspect of the operations was fully discussed and a commencement was made with the discussion of the strategical aspect of these operations; the examination of the latter question is continued and completed in the part of the Supplement issued with the July number of the Revue.

The Strategical Operations,

It is pointed out that an account describing tactical operations can be prepared without regard necessarily to the tenour or continuity of reports in relation to events immediately preceding such operations, but a report dealing with the strategical aspect of the same operations must be prepared with sufficient care to connect up the most recent phase of the situation described with that which immediately preceded it. It is for this reason that the German Headquarters have found themselves faced with difficulties in preparing their official communiqués; it must be remembered that they proclaimed the complete victory of the German arms on the Aisne; further, they subsequently confirmed the reports of their far-reaching success by calling attention to the successive checks of the enveloping movement of the Allies on the Somme. If the sole task remaining to be performed by the German Great General Staff had been to complete the victory already announced, they had somehow to explain how it was that the German forces had retired some 60 odd miles into a region in which the enemy had not, at that time, made his presence

An investigation into the situation discloses clearly enough the divergence between the manwuvre réelle and the manœuvre fictive; the fact that the German General Staff were thus driven into a corner can be traced to the fictitious accounts of the operations

of the first two months of the War which had been given out to the public. One of two situations must have existed: either the enemy had been beaten on the Aisne and his defeat completed on the Somme; in which case, the military doctrine having vogue in Germany—a doctrine conforming to all the sound traditions of war—required, for the purposes of a successful achievement of the plan of campaign, the complete annihilation of the defeated enemy. Or the enemy was still unbroken, in which case, even more than in the first situation postulated, it was necessary not to lose sight of him. The first combinations for obtaining decisive results having failed fresh ones, possessing more certainty of success, had to be adopted. The German General Staff were, however, loathe to wipe away entirely all trace of the original plan of campaign.

The plan put into operation in Flanders to obtain the results hoped for, but not realized, first on the Marne and later on the Aisne, consisted in counter-attacks executed with the object of outflanking the enemy's strategical front; it was the third phase of the same operation, by means of which it was intended to put the Allied Armies out of action. However, this fact could not be made public without disclosing the whole truth and the want of good faith which prompted the issue of the previous communiqués. Consequently, it was necessary to create the impression that the original plan had met with complete success in its execution, and to make it appear that a new plan with a different objective had now been put into operation; the French Army having been disposed of, the campaign against Great Britain was now about to begin. The fighting before Paris, being no longer of importance since it had been virtually won, was now replaced by the "March on Calais."

The German Press recognized no other headline; henceforth all the events on the western front fell under that of the "March on Calais"; the public was led to believe that Great Britain was now the principal foe; France had been finally disposed of.

Looked at purely from the point of view of the correct principles of strategy, the march on Calais can only be considered as blufi. However, in the particular circumstances, it may be that the German General Staff misapplied these principles, thus proving themselves unequal to the task before them; or it may even be that owing to their incapacity, but in good faith, they thought it right to authorize prematurely a change in the general plan of campaign. If the latter of these two hypotheses is the true one, it would naturally detract from the capacity for leadership of the German higher command; on the other hand, it would partially clear the German Press of the reproach of bad faith, so far as its share in the manxwere morale is concerned.

But from whatever point of view the German intentions are examined, the result of the operations remains the same—a check. The enemy had not been shaken off the line of the Aisne, Calais had not been reached. Of course the German public should have guessed the true situation, but it would appear that they did not do so. The German communiqués had made reiterated references to continued daily German successes; the inclemency of the weather had alone seemed to cause a lull. Simultaneously, references to new subsidiary activities had been

employed to keep up the spirits of the people, namely, the Holy War in the near east, and the offensive thrust by Hindenburg in N.W. Poland, promising the capture of Warsaw at an early date.

At the beginning of November, 1914, Germany succeeded in dragging Turkey into the conflict, and whilst the incidents connected with the first battle of Ypres were in progress, the German Press announced loudly the results which were to flow from the Turkish Alliance. was about to secure the victory for Austro-Germany in their struggle against the nations of the Christian faith. In his quality of Khalifa, the Sultan of Constantinople had proclaimed a Holy War throughout the Mohamedan world. On the 12th November, 1914, Berlin declared: "The Fetwa has been issued, calling on all Mohamedans to carry on the Holy War against all except the Allies (i.e. the Central Powers) and neutral states. Innumerable messages have been received from Persia, India, Afghanistan, Egypt, as well as declarations of solidarity from the Sunnites and Shifites, witnessing the complete accord of the whole Mohamedan world." In Germany, it was hoped that not only would the Faithful of the Ottoman Empire be enlisted for the prosecution of the Holy War, but practically the 300,000,000 Mussulmans of the entire world, men as well as women. Reports were published in Berlin of the friendly reception given in the Turkish capital, on the evening of the 14th November, 1914, to the German ambassador; there was much waving of the German and Turkish flags in conjunction. Nazim Bey, President of the "Young Turk" Society, made a speech in which he congratulated the followers of Islam on the fact that they were to wage war in alliance with Germany and Austria, The German ambassador returned thanks for the many manifestations of goodwill shown towards his country, and promised to make a report on the subject to his Imperial Master.

Turkey and Islam had now arrived at another milestone in their history. The hope of certain victory for the three armies, those of the Teutonic powers and that of the Golden Horn, which were now about to operate in conjunction to defend their most sacred possessions, carried conviction, it was alleged, in the east that a new era of good fortune was about to commence for Turkey and for Islam; the Musulmans with the aid of their new allies would now be able to shake off the yoke of France, of Great Britain, and of Russia. The columns of the German Press were filled with matter containing information of the above nature emanating from Turkey, and such matter was placed in juxtaposition with the bulletins of the German General Staff, which persistently continued to announce that favourable progress was being made by German troops at Dixmude and at Ypres.

Again, Hindenburg once more loomed large in the columns of the Press. At the time the Austro-Hungarian forces were yielding all along the line before the Russian advance in Western Galicia, he launched his great counter-offensive against the Russians from Kalisch and from Thorn. The Russians now in their turn began to fall back along their whole front. The future was full of promise; new plans were in execution, it was necessary to forget the "March on Calais" for the "March on Warsaw" had now begun.

The Commencement of the 1915 Campaign.

An examination of the Press service in connection with some of the winter battles of 1914 and those of the following spring sheds fresh light on the rôle played by the official publicity agents, and on the methods adopted by the information services in France and in Germany.

The rigours of the winter necessarily involved a slackening off in the operations; the relative inactivity at the Front caused an increase in the risk that demoralization might set in. This was the case not only as regards the combatants, but to a still greater extent, it applied to the civil population which, being less active, unaccustomed to military discipline, withdrawn from the beneficial reaction which arises from contact with danger, was thus necessarily more apprehensive as to what might be in store by reason of the suddenness of the lull. Since the transformation taking place in the character of the operations was coincident with the change in the season it was thought that the risks introduced into the situation by this apparent calm were increased. The broad outlines of the minor tactics to be adopted in the attack and defence of entrenched positions had now been gradually evolved and standardized. At the end of the autumn of 1914, the transformation above referred to was completed. The battles in Flanders were the last act in the War of field operations of the old style. The fronts were now firmly held fast from Switzerland to the North Sea. The stirring movements of the old style battle tactics gave place to the dilatory procedure of siege operations and, in consequence, winter seemed to have acquired in duration a life of double the normal period. Looking back on the events of this period it may be said: the affair of Soissons was a German success, the engagements in the Champagne a partial French success, the capture of the Crête des Eparges a local French success; later, the second battle of Ypres, in the springtime, a German defeat.

The Affair of Soissons.

At the beginning of January, 1914, the Germans faced the French about 3 miles north of Soissons, astride the Soissons-Laon railway. To the east of the railway, the German trenches had been established on the plateau to the north of Crouy from Perrière to Vregny; the plateau has a command of 395 to 425 ft. above the River Aisne; on the west these trenches extended to a round hill about 1,400 yards N.W. of Crony. The French attacked the advanced positions and carried them. They made good their hold on the position in the days following, repelling the enemy's counter-attacks, and on the 10th January last made a further advance, wresting from the Germans their trenches N.W. of Crouy, and also a part of their line on the Perrière plateau. The day following, the French dug some new trenches in order to strengthen the position captured by them, but on the 12th January, the Germans made a vigorous counter-attack which caused the French to retire from the positions recently won by them. On the 13th January, the French in their turn made a counter-attack on the line Cuffies-Crouv, which proved abortive, whilst to the east of the line last mentioned the French troops fell back to the line Le Moncel-Sainte Marguerite-Missy. A little later, the French troops retreated to the south of the Aisne. The communiqués published by the two sides between the 9th and 15th January inclusive are reproduced in full in the Supplement. communiqués give very divergent accounts of what took place. French version follows, day by day, the progress of the French attack between the 8th and 11th January inclusive; the German version denies the French claims categorically. At one point the German reports are self-contradictory, for after having claimed that for two whole days the German troops had repulsed, with great loss to the enemy, all attacks, it is admitted that on the 11th January the French had established themselves in a part of the German fire trenches. From the 13th January, the French communiqués announce successive retirements from positions recently held by their troops, and the Germans at once sound notes of triumph. The course followed in the German communiqués is exactly similar to that adopted at the beginning of the War; reverses are ignored, successes are magnified up to the extreme

Although the affair of Soissons resulted in a French failure, the engagements cannot be considered to have been more than a local tactical success for the Germans. In their communiqués the Germans compared the fighting with that of St. Privat; this was manifestly an exaggeration.

Since the end of the offensive operations of August, 1914, the German arms had met with no success. The German plan of campaign had not been carried through and the war of attrition, which followed the failures in Flanders, had not, for the space of two months, provided any occasion for announcements which would cause elation in the German mind. Encouraging assurances are, from time to time, a necessity and may, perhaps, have been more so in Germany than in the countries of the Allies by reason of the expectation of rapid victories which was so persistently preached by the military and governmental authorities during the mobilization period. Hence the references to the 1870 War, which acted as a reminder of the successes of a brilliant period in the history of the German Army.

On the French side an effort was naturally made to produce a contrary impression; it must not be understood by this that any effort was made to deny the real results of the engagement. The French retreat was admitted, but explained away as being in the nature of a simple accident due to climatic conditions.

Comparing the series of communiqués issued by the two General Staffs, it can be at once seen that the pompous reports of the German General Staff were framed with the distinct object of stimulating both the army and the civil population; on the other hand, the references to the fight issued by the French General Staff would appear to have been drafted with a view to allaying anxieties which might be caused by a reverse just when recent victories might have led the public to expect rapid decisive results.

The final paragraphs of a German report on the affair of Soissons are reproduced in extenso in the Supplement; in it " the energy, science and

boldness of the higher command, and the magnificent exploits" of the army are extolled in superlative terms.

The French report deals with the causes which prevented the success of the operations; the Aisne was in spate, the bridges over it were broken down, and in consequence the movements of the French troops between the two banks of the river were hindered. The enemy took advantage of this situation and counter-attacked vigorously. After dealing with the incidents of the fight, the report reverts once again to the influence exercised on the French operations by the flood waters of The explanation given may be accepted as the genuine cause of the failure of the French attack; many examples are to be found in the history of wars in which similar untoward circumstances have been responsible for the miscarriage of well-laid plans. It may well be conceived that causes independent of the conduct of the men and the dispositions of their leaders did exercise some influence on the situation. However, whatever may be the true explanation as to the causes which led to the withdrawal of the French troops, it is clearly manifest that after two months of operations in the neighbourhood of Soissons without any apparent result, the General Staffs on the two sides found it necessary on the first opportunity which offered to adopt measures for raising the spirits of their own side, and on the other side, to prevent a drooping in that of theirs.

The two accounts disagree as regards certain details; for example, the German version claims that the success of the German troops occurred in an area having a depth of from 2 to 4 kilometres and a front of from 12 to 15 kilometres. The French version states that the French troops retired for a distance of less than 1,800 metres on a front of less than 5 kilometres. It is not possible to measure off on a map, very exactly, the actual area affected; approximately, however, its depth was 2½ kilometres and its front extended along a line which measures 5 kilometres.

The part played by the German Press in relation to this affair is next examined under the title "La Manœuvre de Presse Allemande." It is necessary to realize that the German success at Soissons was a well-conducted feat of arms of purely local value, but of no strategical consequence. As soon as the victorious troops reached the line of the Aisne, they had to suspend their operations and made no effort to continue and complete them on the days following. No serious attempt was made to cross the river; the German attack appears to have been made on a shallow front. It is these circumstances which endow the literature which was poured out after this episode with its characteristic qualities. The Press was brought into requisition towards the end of the Battle of Ypres. To it was assigned the task of converting a fleeting action into a strategic operation of far-reaching consequences and of representing it as the introduction to a decisive event.

The element of romance in the statements published was even more pronounced than that present in the accounts relating to the important fights in Flanders. These latter engagements had daily offered materials for the Press service; when these fights ceased the references to them also ceased. After the affair of Soissons comments thereon continued

to be published in order to hold the public attention. The fight at Soissons ended on the 14th January, 1915, the Press campaign in relation thereto continued till the 20th and 21st idem.

It was viâ Copenhagen that the Berlin Press Bureau introduced the subject; in order to make known, according to custom, the German version of the affair to neutrals, a despatch dated 15th January, 1915, announced that since the beginning of that month a strenuous fight had developed on the heights north of Soissons. At first the French, it said, had succeeded in driving back the Germans; but in their turn the latter had taken the offensive, and by a vigorous attack had forced the French to retire, who in doing so had surrendered the possession of heights of strategic importance into German hands. The Germans, it was claimed, had thus acquired command of the Josienne Valley and also of the important main railway line and the two main roads between Chauvy and Laon, lying in this valley. At the same time, a despatch from Geneva called attention to an announcement alleged to have been made in the issue of the Parisian Guerre Mondiale of the 14th January, 1915, in relation to the "serious defeat of the French" in connection with an attack on the heights north of Soissons by General Maunoury with two brigades sent against Crouv, which were repulsed, thus bringing the fight to a close; the defeat of the French was said not only to be complete but they were alleged to be retreating in great disorder.

The Berliner Lokalanzeiger announced that the fighting on the plateau of Vregny had taken place under the eyes of the Kaiser, and called attention to the importance of the French attack. Finally, a dispatch from Berlin stated:—" In its report the French General Staff has been obliged to admit a German success at Soissons. The position of General Maunoury has been jeopardized by this check."

The military critic of the Stockholmer Dagblad commenting on the military situation in France and in Belgium now took note of the definite cheek which the French generalissimo's offensive had sustained; considerable attention was paid to this check after the unauthorized publication of the order of the 17th December, 1914. Certain information, reaching the military critic referred to above, had indicated that a great move had been determined upon in order to deliver France from the German invader; the check in consequence acquired very great significance, as indicating that the Allies did not at that time possess sufficient resources to justify them in counting with certainty on victory. The German success at Soissons appeared, according to the Stockholm account, to have more than local value. The apparent failure of the French offensive along a tolerably extensive front also seemed to have strengthened the German position, and to have reduced the chances of the Allies bringing off a decision favourable to themselves.

The news alleged to have been received from France was still more suggestive than that coming from neutral countries. The Berliner Lokalanzeiger announced that a private message received by this paper disclosed that: "The great progress of the Germans on the banks of the Aisne is upsetting the French Military Press." The general nervousness on the part of the French was, it was alleged, also on the increase, and many families residing on the two banks of the Aisne had fled from their

homes and had taken refuge in Paris. Le Petit Parisien endeavoured to calm the Parisian public, but without success. During this time, Berlin caused it to be made known that the German Press was celebrating the success of the German Army at Soissons; it was claimed that this was the most notable success obtained on the western front in four months of war. In spite of the statements to the contrary the affair of Soissons was but of local value, and, as had been done before by the German Press, a red herring was again trailed across the path in the shape of the Zeppelin raids on Yarmouth, Sheringham, Cromer, King's Lynn, and Sandringham. Here was something to excite the interests of the German nation; these air raids were held to be worthy of the superiority in the science of war possessed by Germany. Moreover, England at last was thereby made to feel the weight of her misdeeds in attempting to starve the German people; she had received the just reward of her sins against humanity. The raid was a magnificent advertisement. This new theme, fertile in developments, marked the end of the manauvre morale in relation to the affair of Soissons.

The Engagements in the Champagne.

The engagements in the Champagne seem to mark a new development in the official press service of the Imperial Great General Staff. At no period of the War on the western front has the disagreement in the communiqués published by the belligerents been more absolute and more persistent than in connection with the events in the Champagne. This period extends from the 16th February to 11th March, 1915; it was, however, preceded by many phases of purely local operations. The first of these phases is that of December, 1914, during which the French took the offensive and made some progress on the line Perthes-Le Mesnil-Massiges. The second phase lasted from the 25th January to the 4th February, 1914; this was a period of German counter-attacks followed by renewed activity on the part of the French, which carried the latter's line still further to the north. The third period extended from the 17th February to the middle of March, 1914; the communiqués issued by the two sides during this period are reproduced, side by side, in the Supplement. The two versions absolutely contradict one another. In Germany, the Press Bureau published a commentary on the strategic aspect of the operations, which was in the nature of a scalp dance and was manifestly intended to influence public opinion. Considerable difficulty would, however, have been experienced in finding clear evidence of a victory gained during the three weeks' battle, in which the positions of the opposing forces were scarcely altered. In France, the necessity had to be explained for such long-continued fighting which created the impression that a decisive offensive movement had been attempted, leading certainly to heavy losses, but which resulted only in a French advance of from 11 to 2 miles.

This part of the Supplement concludes with a German commentary on the operations dated 10th March, 1915; attention being drawn therein to the fact that the operations reported during the past few days were the termination of the "Winter battle in the Champagne" and that, as already announced on the 17th February last, this battle

was born of the intention of the French Commander-in-Chief to ease the pressure on the Russians, then engaged in a desperate struggle with Hindenburg's commandoes, in the region of the Masurian Lakes, by a stroke which would pierce the German lines—Vouziers being for this purpose the first objective of the Allies. The commentary continues:— "The issue known as the Battle of the Masurian Lakes shows that this result has in no way been obtained. And as to the attempt to break the German lines, it can to-day be affirmed that the attempt has completely and lamentably failed. In spite of all the allegations contained in the French official communiqués the enemy has not succeeded in obtaining the smallest advantage."

The credit for this result is given to "the heroic conduct of our troops, and to the prudence and perseverance of their chiefs," preeminent among the latter, it is stated, being Colonel-General von Einem. It is claimed that two weak Rhenish divisions had since the 16th February held, by day and by night without respite, a front of 5 miles against more than six army corps, at full strength, which were hurled against the German front in succession; these army corps being supported by heavy artiflery which, being provided with ammunition of French and American manufacture, it is said, often fired more than 100,000 rounds in the 24 hours. It is stated that the Rhenish Battalions and the battalions of the Guard which had maintained themselves with unshakable resolution against enemy forces possessing a sixfold superiority in numbers took 2,450 unwounded prisoners, including 35 officers. An admission is made that the German losses were heavy "owing to the bravery of the enemy's troops"; it is claimed, however, that these losses were not made in vain, since the enemy's casualties have been estimated to have been threefold as great, namely more than 45,000 men. Finally it is stated: "Our front in the Champagne is more solid than ever. The French efforts have had no influence on the course of events in the eastern theatre. German bravery and tenacity have acquired a new title to glory, equal in value to that won almost at the same time in the region of the Masurian Lakes."

The part of the Supplement issued with the August number of the Revue contains a French reply to the foregoing German commentary; it is dated 12th March, 1915. In the first paragraph of this reply it is stated: "The operations which have been in progress in the Champagne for some weeks past have completely attained the object with which they were undertaken. This object had a two-fold character, local and general." The local results are next set out. Continuous progress, it is claimed, has been made; the Germans in spite of innumerable and violent attacks have never been able to retake from the French troops the positions captured from them. The French gain is stated to have represented an advance, in relation to the positions occupied at the end of December, 1914, of from 11 to 2 miles on a front of about 42 miles; and to have made the French masters of a line of heights which afforded a favourable base as a starting point for new attacks. The German losses are said to have been heavy, inter alia, two regiments of the Guard having been entirely wiped out. The reply continues: "Now, the numbers of the enemy engaged have varied between 4 to 5½ army corps, and we have found on the battlefield nearly 10,000 German corpses. We have made nearly 2,000 prisoners, belonging to five different army corps, and taken automatic guns and many machine guns." The general result obtained is next dealt with; it is referred to in the following terms:—"The essential object of the operations begun by us on the 16th February in the Champagne was to hold at this part of our front as large a number as possible of German troops, to cause them to expend large quantities of ammunition, and to prevent completely the transfer of additional German troops to Russia. This result has been completely attained."

These operations caused the Germans to reinforce this portion of the front, between the 16th February and 10th March, with 20 battalions (including 6 battalions of the Guard), I regiment field artillery and 2 heavy batteries (of the Guard); a total equivalent to about I army corps. Even with these reinforcements the Germans gained no advantage; on the contrary, they found it impossible to send any additional troops to Russia, and thus was given to the Russians the opportunity to achieve their brilliant success between the 25th February and 3rd March, when they captured 10,000 prisoners and many guns from the retreating Germans. A great part of the German reinforcements sent to the Champagne front was withdrawn from the northern portion of the lines opposite the British front in Belgium; this was taken advantage of by the British Army, and it scored a success in this region on the 10th March. The reference to the general result attained concludes as follows:-" Thus once more there was in evidence, to the great benefit of the Allied Armies, the close combination of the operations, not only along the western front itself but also between this and the eastern front." Attention is next turned to the German admission made in the commentary of the 10th March, already referred to. It is pointed out firstly that the Germans admit that the French operations in the Champagne began at the period of the German success in the region of the Masurian Lakes; but they omit to state that from and after the 25th February the German success was transformed into a decided check. Secondly, that although the Germans claim that only "two weak divisions" were employed in the Champagne by them yet they mention by name two army commanders, belonging to von Einem's army, who were engaged in this region, and also refer to battalions of the Guard (brought from the north) and "other units called to their support." Thirdly, that in the commentary the German Army is stated to have lost more men in the Champagne than in the battles of the Masurian Lakes; it is known that 14 German army corps and 3 cavalry divisions were engaged in the latter battles. Stress is laid on the point that however substantial the French success in the Champagne may have been, it would still have been exceedingly difficult to cause casualties in "two weak divisions" approaching in numbers anywhere near the heavy losses suffered in Russia by the 14 German army corps. The foregoing statements would lead to the conclusion that 10 divisions are more likely to have been engaged on this front rather than the two divisions referred to in the German accounts. Finally, it is stated: "Our operations in the Champagne:—

" (a) Have been an uninterrupted series of local successes and have only caused us relatively small loss and very few prisoners;

"(b) Have inflicted enormous losses on the enemy, superior even to those suffered by him in Russia at the same time;

"(c) Have obliged him to concentrate on this part of the front 5 army corps and to expend large quantities of ammunition.

"(d) Have contributed towards the brilliant successes won by the Russian and by the British troops;

"(e) Have drawn from the German General Staff explanations which amount to an admission."

The two versions of these operations are next examined and compared. The first point noted is that if the French General Staff had formed the intention to pierce the German front, it is evident that their plan did not meet with success. French troops gained ground, it is true, and wrested some trenches from the enemy, but behind these new lines were constructed by the Germans, and finally, in spite of the success obtained by the French, all operations were suspended. The fact is, it was realized by the French General Staff that too heavy a price was being paid and the object to be gained did not justify the further expenditure involved; in commercial language, the French General Staff decided, under the circumstances stated, to cut their losses. the other hand, if the French General Staff planned the operations in the Champagne with the object of retaining German troops in the west so as indirectly to assist the Russians, a recourse to the manœuere morale for the purpose of removing any ill-effects which might be produced on the public mind by the cessation of these operations can clearly be understood. Having in view the persistence with which attacks had been made in the region of Perthes, close to the bluffs of the Argonne, and assuming that a success there would free the Argonne of the invader, the public, it would appear, had set their hopes on a more patent success than the indirect one connected with the relieving of German pressure on the Russians; the public dreamt rather of an actual victory in the West. There was victory in the making, but it did not materialize. Attention ought to have been drawn to the strength of the enemy's defence works, and the difficulty experienced by the French leaders and their men in carrying them. This probably explains the subsidiary efforts of the French Official Press Service to throw light on the events and to soften the shadows; hence the importance attached to the German commentary, as shown by the length of the reply made thereto, with all the attendant risks of a newspaper warfare.

As regards the strategic result which the French claim to have obtained, which claim the Germans on their part strenuously deny, the former produce in evidence the victory gained by the Russians at the very time that the operations in the Champagne began to support their case, whilst the latter point to the reversal in the relative rôles of the Russian and German Armies on the Niemen from and after the 25th

February, when the pursuing Russians were converted into the pursued army.

But what the Germans put forward as evidence in support of their claim is not conclusive; it may perhaps only prove to be evidence of a defeat if examined closely in connection with the statement that two weak German divisions alone were engaged. The French evidence is also not conclusive; it is more in the nature of an assumption. It cannot be definitely stated, without further information, that the German General Staff had the intention of removing troops from the Champagne front in order to utilize them as reinforcements in East Prussia, unless it can also be shown that other troops were not available for the purpose. Only when the orders issued to the troops on the two sides and the detailed accounts in relation to the operations on the different fronts are made public will it be possible to decide in favour of one or other of the contradictory claims.

It is easier to come to a conclusion in relation to the value of the information contained in the official telegrams published daily. It is patent that there was an absolute lack of sincerity in the German version; it is only necessary to study, on a map, the movements reported to realize this, but there are also many other presumptions which afford weighty corroborative evidence. First of all, there was the general plan of the battle; it consisted of a scheme which was repeated almost exactly practically every day. The French attacked vigorously; a desperate hand-to-hand struggle took place; they were thrown back on to their original positions. Very often the German counterstroke was delivered instantly after the attack. Sometimes the French succeeded in getting a footing along small sections of the trenches, but if they were not expelled the same day, they were certainly driven out on the day following, that is of course according to the German accounts. Very frequently the failure of the French attacks were announced in very categorical terms: "All the French attacks were crumpled up by our fire," and so on. Instinctively, one asks the question why, in the presence of results so disastrous to the aggressor, did not the defender counter-attack, not only in view of his traditions, but above all in the light of the experience gained in the present trench warfare which has established the value of counter-attacks? Can it be that the defender wore down his opponent, but did not take advantage of the latter's exhaustion to seize his trenches! According to his own version, the defender was content to assume the passive defensive condemned in his own Training Manual; a method of warfare never practised by him in peace time, because held to be faulty. Consider next the German statement that only two German divisions were engaged and the French retort that the prisoners taken belonged to five different army corps. In order to make the French evidence conclusive the number of regiments to which the prisoners belonged should also have been given. It is quite conceivable not only that the two divisions referred to belonged to different army corps but the reinforcements pushed to the front may also have been drawn from three other army corps. More reliable evidence on this point is to be obtained by examining the incidents of the struggle, and by comparing, in the light of this examination, the French

version of the battle with the German version. The battle front extended from a point, on the borders of a wood, situated about 500 yards N.W. of Perthes to the farm Beauséjour about 1,600 yards N.E. of Mesnil-Les-Hurlus—a front of about 43 miles. The battle began on the 16th February, by the French wresting about 2 miles (in length) of the trenches from the Germans; the latter counterattacked ten times, but without meeting with success. The French, on the other hand, continued to be successful and won about another 850 yards of trench, on the 17th February, to the N.W. of Perthes. The French strengthened their position along their new line; in the meantime they had to meet two violent counter-attacks, one on the night of February 17th—18th and the other on the morning of 18th February; in the succeeding night the Germans delivered five more counter-attacks. The fighting continued in this fashion for a fortnight or so, and on the 3rd March the positions held by the French represented an advance, from their original line, of about 1,100 yards, on a front of nearly 4 miles. Up to this date, the French had become aware that they had before them in this region German troops belonging to the VI. and VIII. Active Army Corps and the X. and XII. Reserve Army Corps, The Prussian Guard now appeared on the scene on this part of the French front, and took part in a number of counter-attacks made to the north of Mesnil. During a counter-attack which was made on the 4th March it was definitely proved that at least two regiments of the Guard Corps were on this part of the front. The German counterattacks, however, continued ineffectual. Between the date last mentioned and the 11th March, the French continued to make progress and the Germans retaliated with counter-attacks, occasionally winning back small sections of the trenches lost by them, only to be later expelled therefrom. When the French broke off the engagement on the 11th March, their front had been carried on their left to the northern edge of the wood, about 2 miles N.W. of Perthes, and ran thence along the Souain-Tahure Road; and on their right, to a point about 23 miles eastward of Tahure. The line of trenches captured from the Germans extended to a depth of about 11 miles along a front of about 41 miles. Having regard to the number of the German counter-attacks and to the extent of their trenches captured, it must be admitted that in connection with these operations, which covered a period of three weeks during which counter-attacks were delivered sometimes at one point of the French front, sometimes at another, and occasionally along the whole length of the 41-mile front on which the French were operating, the Germans have shown extreme modesty in representing that only "two weak Rhenish divisions" took part therein; the silence observed in relation to the part played by the regiments of the Guard and to the efforts of the German troops generally to annihilate the French troops. alleged to have been beaten, may, it is suggested, also be attributed to the natural modesty of the German character.

The German telegrams relating to the Battle of the Aisne are recalled, and the similarity of the treatment by the German Official Press Service of the fighting on the extensive front between the Oise and Verdun, and of the operations on the narrow front of $4\frac{\pi}{3}$ miles at Perthes is put on

record. There was no change in the methods previously adopted by the German Press Bureau, nor in the liveliness of their imagination.

A systematic and absolute denial of German reverses was the guiding principle on which the Official Press Service continued to be based, and it is in this respect that the French and German methods still differed. Whenever the German arms suffered a reverse the occasion seems to have been seized upon for denying that such was the case; evidence of this is to be found in connection with the accounts of the engagements in the Argonne, which preceded those in the Champagne.

The Engagements in the Argonne.

The operations in this region afford an example of the means employed by the German publicity service, in a situation where successes and reverses constantly alternated, to suppress references to the latter of the alternating aspects of an engagement, in order to create the impression of a series of uninterrupted German successes.

It is probable no one can be found who is prepared to state definitely that the fighting in the wooded country of the Argonne has not been without appreciable influence on the general trend of the operations in the western theatre. During the long period that the German Army sought to resume the offensive on the Aisne and later on the Oise, the Argonne region was believed to be the scene of what are termed altaques principales. Day after day, the Germans denied that they had gained ground in this region; but they appear at no time to have carried their advance to the south of the Bois de la Grurie. From and after November, 1914, it was the French who in their turn announced various successes; however, the general situation showed scarcely any change. The incident of the 11th and 12th February (occurring before the big engagements in the Champagne) was referred to in communiqués of both belligerents; it really produced no essential modification in the state of affairs then existing.

The relative situation of the localities affected affords an explanation on this matter. The contours of the Argonne bluffs are, in a way, similar to those of the back of a donkey; these bluffs lie from north to south between the Aisne and the Aire. Two main roads, namely that connecting Clermont and Ste. Menebould and that between Varennes and Vienne-Le-Château connect the two valleys mentioned. About 2½ miles north of the latter main road a forest track, passing through the Bois de la Grurie, more or less parallel to it, connects Montblainville and Vienne. Still further to the north, another forest track connects Apremont and Binarville. Between the two tracks the forest is thick, with much undergrowth, and the ground is much cut up with more or less deep ravines.

After their retreat from the Marne the German columns marched along the borders of the wooded heights of the Argonne, without entering this region; the German retirement stopped short at the Varennes-Vienne-Le-Château main road, and the two exits thereto from the Argonne forest were occupied by them. The tactical principles inculcated in every country agree in directing pursuing troops to get on to the flanks, if possible, of the retreating foe; the double advantage being

gained thereby that the pursuing troops do not run the risk of being held up by the enemy's rear-guards and further the retirement of the detachments on the flanks of the retreating troops is accelerated, thus reducing the risk of menace to the flanks and rear of the pursuers. The French troops followed the injunction referred to; they entered the forest, between the Aisne and the Aire, at Clermont and Ste. Menehould, and advanced along the central road from Les Islettes on Four de Paris. They pushed on to the first of the forest tracks mentioned earlier, prepared to form front either towards the cast or the west. The Germans, desiring to cover their points d'appui at Varennes and Vienne, also entered the wooded heights, but were not able to move far on the western border of the forest, as the French troops had made good their hold on this edge from Binarville to Vienne-Le-Château. By degrees the French were able to push their right and centre as far as the banks of the Aisne; the Germans, however, maintained their position on the line Vienne-Le-Château-Melzicourt. On the east, the French were unable to push their way to the edge of the forest; here they came into collision with a strong force of the XIV. German Army Corps, between Varenne and Montblainville. It was in the region last mentioned that the autumn, winter, and spring campaign of 1914-15 took place. The French established themselves on a north to south line, north of the Varennes-Vienne main road; during the period of the German success in October, 1914, they wrested some trenches on this line from the French and penetrated some distance into the forest south of the Varennes-Vienne main road, but a French counter-attack made during the last days of October expelled the Germans from many of the trenches captured by them.

From this time to the date of the commencement of the operations in the Champagne no change took place in the situation. The two French lines remained back to back; the western line being partly in rear of the German front at Vienne, whilst the Germans held trenches on the right flank of the French eastern line.

The German General Staff have published a pamphlet entitled, Die Kämpfe im Argonnerwald, dealing with the operations in the Argonne; it was reviewed in the number of the Journal des Débats for the 10th February, 1915, extracts being published to show the character of the wood fighting in fortified positions. The Germans, it is stated, drove three mine galleries from their fire trench, on the 7th December, towards the French position; the right and centre galleries were carried to within 18 to 20 yards and the left gallery within 8 yards of the French trenches. The French were however prepared and exploded a countermine under the German left gallery and blew in 10 yards of it. By the 19th December, the Germans had repaired the damage done and also pushed forward their right and centre galleries to within 6 to 8 yards of the French trenches; from the heads of these galleries they drove branch galleries, about 3 vards long, and established a line of mines which were exploded at 8 a.m. on the 20th December. The assaulting columns which were held in readiness bounded forward and carried the French trenches. The Débats draws attention to the fact that the German account omits to make mention of the recapture, by the French,

of two-thirds of the trenches lost by them. This account gives some idea of the manner the German public was kept informed of the progress of events in the Argonne, on the eve of the engagements in the Champagne. Attention was drawn, in connection with the Battle of the Marne, to the official communiqués published in Germany for propaganda purposes. An extract is given from the Kriegschronik, a monthly production in German and French, published at Berlin, in which the operations taking place in the Argonne during January, 1915, are summarized; German successes and French checks are alone referred to. During January, according to the Kriegschronik, 81 victories were gained in the land war by German troops, excluding the Turkish successes, and not the smallest reverse was suffered. The only reservation there is concerns the Austrians; it is related, under the date 8th January, 1915: "Owing to the appearance of superior Russian forces, the Austrian troops which had advanced beyond the Carpathians, in Bukovina, had withdrawn to the principal passes." The defeat of the Ottoman Army by the Russians on the 20th January is referred to in the following terms:-" Owing to bad weather, the operations in the different parts of the Caucasus have been suspended." During this same period at least a dozen failures and definite reverses were admitted in the French communiqués, exclusive of the Soissons affair, and a number of fleeting reverses, in which the French finally rectified their failures.

Various Episodes occurring between 10th February and 9th March, 1915.

Attention is next devoted to certain episodes which occurred during the period 10th February—9th March, 1915, whilst the operations in the Champagne were in progress.

The first of these episodes is that connected with the French defence of the work Marie-Thérèse, in the Argonne region; this work, which constitutes a particularly pronounced salient in the Bois de la Grurie, was the scene of a strenuously contested fight which took place on the 10th and 11th February. The German communiqués in relation thereto create the impression that a German offensive had resulted in a success, local it is true, but concerning which there could not be a shadow of a doubt; the exact locality of the success did not appear to be considered of much importance. It was stated that the enemy had suffered serious loss, but no mention was made of their own casualties.

The French telegraphic accounts of this same episode give a picture of a defensive stand which was crowned with success, but at a considerable sacrifice in lives. The amplified French account, covering the operations 7th—17th February, admits that, although the French troops gained a success, it was not absolute; further, it is admitted the Germans had also gained ground, their advance being estimated at 20 yards. The essential details of the episode are reproduced from the amplified French account in the Supplement.

It is not necessary to consider how far the details made public in the two versions correspond with the actual facts, but to consider alone the publicity methods adopted on the two sides. Both in the telegraphic and the amplified French accounts no hesitation is shown in admitting a reverse; in the later account, the reverse is referred to quite openly, because the episode being at an end, there was now nothing in it to alarm the public. The German account, as usual, claims a success without any qualification and disparages the enemy, who is alleged to have been defeated owing to his definite inferiority.

The episodes of Saint Eloi and of Roclincourt are next dealt with. An official telegram, emanating from Berlin on the 15th February, announced that the German troops had taken possession of a part of the enemy's position for a length of about 900 yards, and that counter-attacks had been delivered by the enemy without achieving any success. On the two following days German telegrams announced that the attempts made by the British and French troops to recapture the trenches, which the German troops had wrested from the British, had proved fruitless. The French Press Service made no reference to the incident in its communiques of the 15th February, but on the day following it announced that the British troops had on the previous day retaken the two sections of trench, between Saint Eloi and the Ypres Canal, lost on the 14th February. This information was confirmed, a statement being published that after two days' hard fighting the British had regained the lost trenches. British Press Service followed the example of the French Service. The termination of the episode was awaited before mention was made of it; on the 17th February, the announcement was made that the enemy had attacked the British front in the Ypres region and had succeeded in capturing many sections of the trenches, but that these had been won back by counter-attacks during the succeeding days. The whole truth regarding this episode will not be known until the full details regarding it are published by the two sides; the situation is similar to that in relation to the engagements in the Champagne mentioned earlier in this Review. On to the episode of Saint Eloi there was grafted another, analogous thereto, which occurred on the 17th February to the N.W. of Roclincourt. The German and French accounts relating to this episode flatly contradict one another; in the former, it is stated that the French had been expelled from the German trenches on the Arras-Lille road, captured by them, whilst in the latter account it is claimed that the German attempts to regain these trenches were repulsed with heavy loss to them. The French version of the episode bears the impress of truth, whilst the German version is a shuffling statement which contains its own condemnation.

Another of the incidents briefly dealt with is that known as the Episode of Norroy and of the Xon Peak. The Xon Peak, a sugar-loaf shaped mountain the summit of which is about 1,200 ft. above sea level, is situated to the north of Pont-à-Mousson on the right bank of the Moselle; its western slope descends in a sharp gradient towards the Moselle, whilst its eastern slope dies away gradually towards the Seille. About 1,100 yards from the summit of this peak, and N.E. of it, lies the hamlet of Norroy. On the 14th February, a Berlin communiqué announced that German troops had wrested the hamlet and peak from the enemy, taking 2 officers and 11 men prisoners. No mention was made of the incident for three days, but on the 18th February the German Press published a statement to the effect that after the complete

destruction of the trenches, the peak and the hamlet had been evacuated by German troops; further it continues; "The enemy have made no attempt to retake the position by force of arms."

In the German account of this affair the public is asked to believe that although the lives of German soldiers were risked in the operations to capture the Xon Peak, the only object in view was to destroy the entrenchments and then after a three days' German occupation of the position quietly to surrender the latter to the enemy again. it is extraordinary to think any public could be made to believe that the value of this position, from which the approaches to Pont-à-Mousson and the bridge over the Moselle (only 2 miles distant) could be directly commanded, was in reality so little esteemed by the German Commander; and that the French, having been driven out of works forming a bridgehead, would make no effort to regain the same. However, the French have placed on record their version of this little affair. On the 14th February, the public first became aware that the French troops had met with a mishap in this locality, and on the 19th idem learnt from a communiqué issued that morning of the termination of the episode, communicated to them in the following terms:-" In Lorraine, in the Xon region, we have delivered an attack which has enabled us to regain the village of Norroy and to reoccupy the whole position. The announcement made by the Germans in their communiqué to the effect that they evacuated Norroy is untrue; they were chased out of the place."

Next there follows a reference to the Episode of Vauquois; the struggle which developed round Vauquois was something more than an episode, it was really a battle. It is the German account of this affair which creates the impression that it was merely a very minor incident. Both the German and French versions agree in stating that there were two distinct phases in the action. The first phase commenced on the 18th February and was referred to in communications from Berlin, bearing this date and of the day following, which stated that the French attacks directed against the German position Boureuilles-Vauquois had ended in the enemy being completely checked, with the loss of 5 officers 479 unwounded men taken prisoners. The French telegrams of the 18th February allude to this action in the following terms:—"We have made some progress in the Boureuilles region."

The second phase commenced on the 28th February; the communiques, issued between the 1st and 6th March, in relation thereto are published in parallel columns. The German version of the episode conforms strictly to the traditions of its Press Service; it represents a defensive battle, passive but victorious; the enemy, it is alleged, made many useless attacks each of which was crumpled up. The French version also conforms to the traditions of its Press Service; a picture of the fight is given of this incident which has a truer ring about it than that issued from Berlin.

The part of the Supplement issued with the August number of the Revue concludes with an introduction to the Episode of Notre-Dame-de Lorrette, the account of this affair being continued and terminated in the part of the Supplement belonging to the September number of the Revue.

The Episode of Notre-Dame-de-Lorette was only an incident in the long-drawn fight, which ended in May, 1915, resulting in the capture by the French of the heights of Notre-Dame-de-Lorrette, N.W. of Arras. This incident occurred just at the time that the Episode of Vauquois was terminating. The French and German communiqués in relation to this affair, issued from the 4th to 8th March last inclusive, are reproduced in parallel columns in the Supplement, information concerning the subsequent operations being given in a summarized form in the text. This is another of the cases in which it is at present impossible to say exactly what did happen. In the French communiqué of the 4th March it was announced that the Germans had seized the French trenches near Notre-Dame-de-Locatte. The German communiqué of the same date contained the additional information that the extent of the position gained was 1,750 yards and that 8 French officers and 558 men together with some guns had been captured. On the 5th March, the French communiqué stated, "We have retaken the greater part of the trenches lost the day before yesterday and have made 150 prisoners"; and the subsequent telegrams show that the French continued to make progress in this region. The German telegrams, however, persisted in announcing the failure of the French efforts; and indeed on the 9th March a Berlin telegram stated, "Our troops have wrested from the French two new trenches." Even in the month of May, after the French had captured the works which made them masters of the Lorette Heights, the German communiqués continued to announce the repulse of the enemy's attacks with heavy loss to them. The German version creates the impression of a German attack which was successful from the outset and produced definite results; the French version admits a German success, but also tells of a French counter-attack which ended in the positions lost being regained. From the tactical point of view both accounts are correct. However, one thing raises a suspicion against the German version; the sudden cessation of information on this situation on the very day that the French claim a victory in categorical terms. Since the French version in the beginning admitted a check, there are no grounds for questioning its veracity. The fact stands out that the French did not obstinately continue to deny a German success. whereas according to custom the Berlin accounts did deny the French success.

The Episode of Badonvillers, which took place on the 27th February last and the succeeding days, is the last of these incidents; this particular episode has, up to the present time, remained an enigma. On the 28th February last, a German official telegram announced that on the preceding day the French had been driven from their positions on the line Blamont-Bionville, after violent fighting on the eastern borders of the Vosges. The German offensive had carried their front to the line Verdenal-Bremenil-Badonvillers-Celles; this offensive, said the telegram, has thrown the enemy back 3\frac{3}{4} miles on a front of 12\frac{1}{2} miles. All the attempts of the enemy to reoccupy the area lost have failed with heavy loss to him. The manner of presentation of this information was such that it might well attract attention; nothing like this measure of success had been heard of since the victories of the previous August. Even

the Battle of Soissons had not obtained a success on the same scale. The French telegrams did not furnish any explanation on the subject. On the following day, the Berlin communiqué had no additional information to give on the subject, but appeared rather to reduce the importance of the engagement to that of a local incident. A French communiqué now made the announcement that there had been stiff fighting in the Vosges at La Chapelotte, north of Celles, and that the Germans had been completely repulsed. There was probably some advanced work connected with frontier defence at Chapelotte, and it is possible a purely local scrap at this point had been magnified by the Germans into an engagement on a 12½-mile front. For some days no other places were spoken of. The two sides continued to publish reports contradicting one another, the only point on which they were in accord was the locality of the collision.

Conclusions on the Engagements in the Champagne.

The engagements in the Champagne are important from the point of view that they mark a change in the western theatre from a German offensive to that of an Allied offensive; and coincidently with this transfer of the initiative from the one side to the other, there also took place a very important transformation in the tactics hitherto employed, namely a change from the ordinary methods of field warfare to those of siege operations.

Up to the period of the Battle of the Marne, the German offensive had proved very violent and ceaseless; the formidable and surging German torrent had upset all obstacles in its path. The Marne position was in the nature of a breakwater against which the advancing German wave broke and was thrown back, but although the waters receded the intention to cause an inundation was not abandoned. The broken waters were turned into other channels, with the object of avoiding the first obstacle to their progress, but at the Somme, the Lys, and the Yser, their flow was again interrupted. The battles in Flanders were the last assault; here the torrent was finally dispersed.

The Allies now took steps to recover the ground lost and attempted to do so by undertaking a large number of local operations. This procedure was ineffectual. The loss of cohesion and the demoralization of the German Army was not such as to cause them to give ground on a large scale.

The engagements in the Champagne led to a more pronounced form of offensive battle in a predetermined sector, the attack in depth, but accompanied by the obligations imposed by the new tactical methods—these obligations being imposed by the strength and solidity of the trenches as well as the power of the weapons in use. The strength and solidity of the trenches in the present campaign have made an intense artillery bombardment a necessity, the bombardment being succeeded by an immediate and brusque infantry assault with hand grenades and the bayonet. In consequence the process of winning victory has slowed down in order to correspond to the new pace set by field manœuvres. Victory too now consists in gains of apparently doubtful value obtained by the sustained efforts of considerable forces operating on a narrow

front. In the Champagne, victory has been on the side of the Allies; since it is their enemy who has retired; further, all the latter's efforts to regain the region evacuated have failed along the front won back by the Allies and consolidated by them.

The combatants in contact with one another alone realize the truth in relation to the actual situation at the front. A few hundred yards to the right or to the left of the fire trenches or a few hundred yards in rear of them, all the information available is hearsay, and the official publicity service possesses the advantage of being able to represent even the loss of trenches as a theoretical victory; this service it is which supplies news to journalists and the public, who, both far removed from the scene of operations, desire to learn of victories alone and are impatient in regard to checks and failures.

The engagements in the Champagne have been the first in which previously unheard-of conditions have prevailed; it therefore becomes necessary to study with special care the official telegrams relating to these operations. The motives which have been actuating the Official Press Services in France and in Germany, since the Battle of the Marne, have been widely different. In France, an improving situation has had to be dealt with; the accounts published have announced the successes won with due moderation. In Germany, having in view the fact that the spirits of the populace have had to be maintained in consequence of the Allies having assumed the offensive, the Press Service has judged it expedient not only to deny, in the most absolute terms, all German reverses, but has even gone the length of claiming the victory of last winter in the Champagne.

The evidence in favour of the French version is as follows:-

- The general description of the fighting corresponds with the sort of thing past experience has led one to expect, and agrees with the military doctrines preached in Germany, and is not, like the fighting described in the German version, a mere paper scheme.
- The movements, if followed on a map, indicate a natural progress and seem to pursue so normal a course in relation to the places mentioned as to appeal to one's sense of logic.
- 3. The German accounts have consistently denied the successes of the Allies in every part of the field of operations from Switzerland to the North Sea, both before and after the periods of the struggles in the Champagne. The situation created has been altogether unreal, in no war has one combatant been able to have it all his own way for so long a time when all the advantages, small as well as big, have been always and constantly on the side of his victorious adversary.

Judged by all the precedents of the period August, 1914, to January, 1915, it is on the French version that the history of the War, when it comes to be written, will be founded.

During the months of August and September the German General Staff were carried away by their pride; they had wished for war without any misgivings, having persuaded themselves that the superiority of the German Army over that of the French Army was such as to make success for their side certain. In the early reverses they only saw fleeting accidents, consequently it was permissible to dissimulate in relation to them; moreover, it was probable that successes would follow almost immediately to wipe away all trace of the reverses, and all would then be well. In the contrary case, if successes did not follow, it would be necessary to prevaricate; the Press Service would put forth all its resources to assist in this game.

During the engagements in the Champagne pride was probably no longer the motive for the manœuvres de presse, but rather was it mother necessity. The situation had changed much since the victories of the early days of the War. An early peace on German terms was no longer the immediate prospect; it was now a question of a deferred peace on honourable terms. The necessities of the situation made it incumbent on the German Government to dissimulate once again both in relation to the War by land as in relation to that on the sea.

The Capture of les Eparges.

Three considerable tactical crises are associated with the names of Combres and les Eparges; the first occurred on the 17th February, 1915, and following days; the second lasted from the 18th to 21st March; the third from the 5th to the 12th April.

The ridge of les Eparges, situated on the confines of the Woëvre region, forms the forward crest of the Meuse Heights. The Germans occupied this ridge on the 21st September, 1914, at the time that they succeeded in driving in their wedge towards St. Mihiel. The village of les Eparges, however, remained in French hands, as well as the valleys and slopes further to the north, including the Côte des Hures; on the 9th February last, the French also took St. Remy by a coup de main. The Germans had firmly established themselves on the ridge of les Eparges, their trenches and works being arranged so as to give several tiers of fire; this position gave them command over a great extent of country and over the important roads between les Eparges and St. Remy and between Combres and St. Remy. The first of the tactical crises in this region had its origin in the destruction of the German defences, effected by the explosion of French mines on the 17th February last, which was followed by a prolonged struggle, of a fluctuating character, between the contending parties. At first, the Germans were taken by surprise, but later they recovered their senses, and delivered a successful counter-attack on the 18th February, robbing the French completely of the fruits of their first success. Still later on the same day, victory once more smiled on the French troops and, by the morning of the 19th idem, the German works were once again in French hands; as on the previous day the Germans counter-attacked and recovered their works, but only for a short while. The French were, however, not left in peaceful possession of the captured works; the Bavarians made four attempts to retake these trenches and only ceased their efforts at midnight of the 19th-20th February. The situation of the French troops nevertheless remained precarious and in order to make their position more secure an attack was ordered on the morning of the 20th

February against the German defences on the eastern spur of the heights of les Eparges. Another fluctuating struggle ensued which ended in the French finally gaining the upper hand, with the gain of some yards of German trenches; thus ended the first crisis. Let us now consider for a moment the manceuvre morale in relation to this affair.

At first, there was no mention of the struggle either in France or in Germany. Silence was first broken on the subject on the 19th February; on this date it was announced that the German Headquarters had published a statement to the effect that French-troops, after gaining a success near Combres (east of Verdun), had been repulsed with heavy loss. The French telegram, in relation to this affair, sent out at 7 a.m. on the date last mentioned, stated: "We gained ground at les Eparges, on the Heights of the Meuse, on the 17th, and have retained our hold on the position won in spite of the enemy's counter-attacks." This account gives the final result of the fighting, without entering into the kaleidoscopic changes of the struggle, and conforms to precedent. The German telegram also conforms to the traditions observed in Berlin; its date is prior to the final German reverse of the evening of the 18th February and may have been issued before the news of the reverse reached German Headquarters. If this was the case, it would have been honest to announce the fact on the following day. Unfortunately, not only was this not done, but information actually published later, states the very contrary. On the 20th February, the German Headquarters announced that the French were repulsed at Combres, to the north of Verdun, and that fighting was still in progress in this region. At this time the German Headquarters must have been in full possession of the true situation. Twenty-four hours later, a German telegram of the 21st February announced that, near Combres, "three French attacks, delivered by a considerable force and with great persistence, had been repulsed with great loss to the enemy." On this occasion, as in connection with the Liège situation in the first days of war, the German Headquarters resorted to barefaced equivocation. All that can be said is that the principles on which they acted were identical to those guiding them in the past. The German public remained in ignorance of the small change which had taken place in the situation at les Eparges between the 17th-21st February, 1915, to the prejudice of their troops, as they had remained ignorant of the larger change of a similar nature which took place on the Marne, between the 6th-11th September, 1914.

French telegrams, dated 20th to 22nd February, dealing with this situation, are reproduced in the Supplement: they refer to the German counter-attacks against the trenches captured from them; and the last of them shows that the seventh German counter-attack had failed to carry the position which the French had captured ten days earlier.

The Journal Official of the 16th April, 1915, contains a recapitulation of the operations in the region of les Eparges; in this account it is stated that three French battalions took part in the second tactical crisis at les Eparges. These battalions made attacks on the German position from the 18th—21st March, but made little progress; an attack delivered on the 27th March by a French battalion of chasseurs

was more successful. The French and German communiqués, issued from the 19th to the 22nd March, in relation to this crisis are reproduced in the Supplement. Those issued on the succeeding dates were framed on similar lines to the communiqués reproduced. The German accounts make no mention of the success gained by the French battalion of chasseurs on the 27th March; the French communiqué of the 28th idem, however, announces that this battalion captured 150 yards of German trench. Put shortly, a claim is put forward in the French version that the operations during the second crisis had resulted in a further improvement in the position gained by the French troops, since the first crisis ended; the German version, on the other hand, maintains that the relative positions of the two sides showed no change in relation even to the situation prior to the first crisis.

The third crisis had its origin in the operations undertaken by two French regiments for the purpose of capturing the western and eastern extremities of the crest along the summit of les Eparges; the operations began at 4 p.m. on the 5th April, 1915, there being two phases in the first stage thereof. As was the case at the beginning of the first crisis in the previous February, the French early in the day seized a portion of the German trenches and established themselves therein; on the east the French attack was held up by aerial torpedoes fired by the Germans on the French troops. At 4.30 a.m. next morning the Germans brought up fresh troops, which fought most gallantly, and the French had to give way before them. The same evening the French troops returned to the attack, and again captured some of the enemy's trenches on both wings of the German position at this point. The Germans made constant counter-attacks, but they were unable to gain a footing in the works they had recently lost. Fresh German troops were now brought up and made a lodgement in the trenches held by the French troops, who thereupon retired. It was the turn of the French now to await reinforcements; the Germans, however, were too exhausted to push their counter-attack further. The French and German telegrams, of the 6th-8th April, containing an account of the operations are reproduced in parallel columns in the Supplement. The Berlin telegram of 6th April agrees with the French account of what was taking place. The telegrams of the two sides, dated 8th April, in no way agree; these two accounts can only be reconciled on the assumption that Berlin deliberately wished to create a confusion in the public mind in relation to the ridge of les Eparges and the plateau of Combres. A mixture of truth and untruth was incorporated in the German telegram in such a way as to create the impression that the German troops had been victorious, yet this was contrary to the actual facts of the situation.

On the morning of the 8th April, the struggle entered on its second phase. Reinforcements having reached the French, an attack was undertaken to capture the summit of les Eparges; it was reached by French troops at 10 a.m. The fight, however, continued for the whole day, and it was only at midnight of the 8th—9th April that the French could really say, with correctness, that they were in possession of the whole

of the German works on the summit. The Germans, however, continued to hold a small triangular patch on the eastern extremity of the crest. The French made themselves possessors of this triangular patch during the third and last phase of this crisis; to do this an additional regiment had, on the 9th April, to be brought up as reinforcements. It was not till the evening of the date last mentioned that the French felt themselves to be really masters of these heights; they had to meet a final counter-attack during the night of the 11th-12th April, and repelled it. The French and German communiqués issued during the 9th to 10th April are reproduced in the Supplement; they recall those relating to the engagements in the Champagne. These messages absolutely contradict one another as well in regard to details as to the results obtained. The French version mentions the two last attacks as taking place on the night of 9th-1oth April; whereas the German version gives the date as the morning of 11th April, and even emphasizes this point. If it could be assumed that the Berlin report of the 11th April referred to the date on which information was sent by the German General Headquarters, the discrepancies could be explained; however, it is known that this is not the case since, in a general account of the engagements between the Meuse and the Moselle published, on the 16th April, by the German General Headquarters, it is again stated that the French attack was made on the 11th April. After the final capture of the Summit of les Eparges on the 9th April, the French attempted to make themselves masters of the Combres Heights but were repulsed. It is therefore quite possible that the Germans, in accordance with a habitual practice, may have hoped to mask the defeat at les Eparges by the success at Combres. But this hypothesis has to be considered by the light of the French communiqué of the 12th April, relating to the events of the preceding day; it states: "No infantry action has been reported in the region of les Eparges and Combres (not underlined in the original French telegram) since our success of 9th April." If this information is correct, one is driven to the conclusion that it is a lie and not an equivocation which has to be dealt with. The French documents have all along spoken only of their success at les Eparges, and as a matter of fact the dominating ridge is situated at les Eparges and not on the small plateau of Combres; this tangled explanation throws a strong suspicion on the bona fides of the German General Headquarters and creates an unfavourable impression.

The author of the Supplement article finally records his conclusions on this situation. He states that, leaving aside the contradictions in dates and other details referred to above and limiting attention merely to an appreciation of the results, the operations around les Eparges must be judged by the same standards as those employed in the case of the engagements in the Champagne. It is patent that there had been a local victory for the French; they had captured a work commanding the enemy's position, after driving the latter therefrom. But the French success had not been carried far enough to include the lower ridge of the plateau of Combres; consequently the French did not reach a point immediately in rear of the German lines at Saint-Mihiel. According to the German accounts, had the French attempted, on the 11th April,

to get in rear of the Germans at the place last named, they would not have succeeded in doing so. But to deny the capture of the upper ridge by the French as the German Headquarters did, is equivalent to saying that the French did not succeed in carrying the works on the summit of les Eparges, that on the 12th April, when the struggle ceased, the two sides were exactly in the same positions as they occupied on the 16th February last; in a word, the German version amounts to a suggestion that the story of the varying incidents of this prolonged attack was born of the fertile imagination of their adversary. This really is the limit and even the most complaisant may well refuse to have their credulity imposed upon to the extent of accepting such a suggestion as being within the possible bounds of truth. The German version would have one believe that in this case, they were fighting a passive defensive battle, and that the French repeatedly advanced to the attack, being repulsed on each occasion. The only difference between the German version of the fighting in the Champagne and that in relation to the affair at les Eparges lies in the admission that in the former case the French attack followed the line of advance indicated in the French communiqués, whilst in the latter case an equivocation is resorted to as regards the line of the French attack, further there was at the outset a suppression of all reference to the repulse of the German troops although this was admitted later. The latter account was certainly more ingeniously framed than the former, but this did not make it any the more true.

As has already been stated, the French efforts between the Meuse and the Moselle to straighten out the German wedge towards Saint-Mihiel failed; this wedge therefore remained directed towards the Meuse, but it had been slightly squeezed in. Even if the original intentions and hopes of the French had not been able to produce results beyond this, it was nevertheless justifiable to apply the term "offensive reconnaissances," actually employed in the French communiqués, to describe the incidents in the Woëvre. On the other hand, if the situation was really otherwise the use of this term was but the employment of the mancurve morale for the purpose of minimizing the failure, just as the furious denials of the slightest repulse were so in the case of the German accounts.

The Battle of Neuve Chapelle.

In order to support the conclusions arrived at in relation to the engagements in the Champagne and the fighting in the region between the Meuse and the Moselle, it is interesting to compare the British and German telegrams. The former have, generally speaking, inspired a measure of confidence, whilst experience has made it necessary to put limits on the veracity attributable to the latter. Sir John French's retreat during 23rd—26th August, 1914, was represented by Berlin telegrams as a disorderly flight which must end in the definite dispersal of the British forces. However, a little later, these same British troops were found in line with the French Army, pushing the Germans back at the point of the bayonet. To-day, it can be said, in relation to the German accounts on the one hand and the report sent by Sir Edward

Grey on the 20th August, 1914, to the British Ambassador at Berne on the other, that it is the latter which is the more worthy of credence.

The British, moreover, have standing to the credit of their account the precedent created in the Boer War: it is remembered that their defeats, during the first months of that campaign, were immediately chronicled. It is a matter of national character. The British are sportsmen; they make it a practice to play the game; sports develop loyalty. The task of reporting is easier to the British reporter than to any other, not only because the possession of sangfroid is inherent in the British people, but also because danger, being more distant, their sangfroid is put to a smaller strain. In their island home, the British are protected from violent blows; they know or believe that they are little exposed to danger; and they who have no reason to fear are able to bear without any great effort the influences which affect others. Such is human nature. A serious accident next door to a man's home moves him more than one of a hundredfold greater magnitude at the Antipodes. It is not a question of learning whether it goes well or ill, but rather whether it is well or ill. The manauvre morale only preoccupies itself with that which is,

The British Navy looms large in the eyes of the British public; it has secured supremacy on the wide seas. The British Army is less in evidence; it has not been considered an essential element in providing for the safety and greatness of the British Empire; it has been destined to take part in distant expeditions, the conquest and retention of colonies. On the Continent, it is otherwise; it is the French Army which defends the sacred soil of France. Loyalty to the entente cordiale it is that caused Great Britain to contribute a few divisions for the land campaign in addition to her major contribution of a powerful Navy to preserve the free use of the seas to the Triple Entente. Public opinion in Great Britain has, from the commencement, demanded that whether the news from the Front be good or bad it shall be made known immediately and with candour; it is the whole truth and nothing but the truth that is asked for; this attitude of the public has rendered the task of the reporters an easy one.

Attention is called to Sir John French's dispatch of 5th April last containing an account of the Battle of Neuve Chapelle. At the time that this battle took place the Russian Army was making headway with marked success against the violent and repeated attacks of Hindenburg's army; in the general interest of the Entente Powers it was necessary to ease the pressure on the Russians by holding as large a number as possible of German troops in the western theatre; the French co-operated with the British, with the object of attaining this end, by their operations in the Champagne and in the region of Arras. The Battle of Neuve Chapelle commenced at 7.30 a.m. on the roth March last by a formidable artillery bombardment of the German positions. Half an hour later, two brigades of the 8th British Division and an Indian Brigade delivered an attack against the German trenches, along the front of which the wire entanglements had been demolished by artillery fire. Well-sustained rifle and artillery fire was directed against the German defences, and the whole village of Neuve Chapelle and the roads leading from its eastern extremity towards the north and south-west fell into the hands of the British troops. During this time, the British artillery kept up a heavy shrapnel fire on the ground near the village so as to prevent the Germans pushing forward reinforcements. It now became necessary for the British to make good their hold on the position gained, and to reorganize the units which had taken part in the attack and had in consequence become mixed; a task made particularly difficult, as the enemy was still able to bring machine-gun fire to bear on all the approaches of the village and it was already nightfall. The attack was renewed on the following day, but it soon became evident that progress was impossible, since there were still many buildings and other points occupied by the enemy which had not yet been bombarded, John French draws attention, in his report, to the unfavourable atmospheric conditions which prevailed on the 11th March, and to the fact that the telephone lines between the gun positions and the observation stations had been all cut. Reference is also made in the report to the counter-attacks made by the Germans on the date last named, it being further stated in the dispatch that the main object in view having been attained, and for other good and sufficient reasons, the G.O.C. 1st British Army was directed to discontinue the offensive movements and to maintain and consolidate the ground gained. The general impression created by the British official account is the same as that produced by the French accounts of the fighting in the Champagne; a victory won, but at great cost, and of which the victor was unable to take advantage. The heavy losses are admitted, but the results obtained, although partial, are held to have been sufficient to justify the expenditure in men. The British and German telegrams of the 11th-14th March are reproduced in the Supplement; on the 15th idem the discontinuance of these operations was announced by the British Field Marshal, but the Germans made no further reference thereto; to make up for it, however, the latter announced, on the date last mentioned, that German troops had made good progress at St. Eloi, south of Ypres-this position being occupied by the British. The progress was later converted into a definite German success. On the 16th March, the German Headquarters announced: "The British position on the heights near St. Eloi, south of Ypres, a struggle for the possession of which was in progress last evening, has fallen into our hands." This information was correct; on the 16th March the British Commander-in-Chief reported the loss of the position as having taken place on the 14th idem, adding that the greater part of the lost trenches had been regained on the succeeding morning. The German telegrams make no mention of the latter detail. Nevertheless the German procedure differs in this case from their past practice; the public are let in a little behind the scenes in a way they had not been earlier. The Berlin telegrams of the 11th-13th March tell of the penetration, at certain points, of the British troops into Neuve Chapelle; the manauvre morale consists no longer of mere negation but rather of a simple manœuvre directed towards minimizing the results obtained by the enemy. Without doubt the check to the Germans had been too prompt and too marked to make it possible for them to contest the point. Wholesale denials had already raised too great an outcry of

indignation to be again resorted to, and had caused some surprise even in the ranks of the German Army. The German Press Service, therefore, fell back on the manauvre of minimizing results, and, on this occasion, with some artistic success. First the tone of the three German telegrams was such as to give the impression that the affair was a very trifling incident; it was a skirmish rather than a battle. So true was this, that no announcement was made of any efforts to retake the village. The German commander had suddenly hit on an idea; an attack was prepared; but later realizing that the enemy was in far too superior strength, he had as suddenly decided not to put his plan into operation. Even from the German point of view the British telegram of the 13th March is more true and gave a more accurate picture of the situation. The German accounts are even silent on the subject of the counter-attacks made against the British position on the night 11th-12th March. This silence gains in importance by reason of the official measures taken, during the following days, to hide these German activities with a view no doubt to reducing still further the importance of the reverse which was admitted. As usual, the German Press Service dragged in the neutral Press to its aid. Ouotations are made from a report emanating from Amsterdam on the 20th March, in which reference is made to a letter stated to have been contributed to the Times by an Army medical officer. It is alleged that, in the letter in question, the writer announces that wounded are coming back, day and night, from the Front, and that the hospitals are all full. This Amsterdam report was accompanied by another from Stockholm containing the information that the military correspondent of the Gæteborger Handelstidning had made it known that the British losses at Neuve Chapelle were exceptionally heavy; that the British casualties were estimated at 12,000 men, the battle having been the bloodiest local combat of the War. Two days later the subject was enlarged upon. It is now the turn of London directly to contribute its quota to the literature prepared for keeping up the spirit of the Teuton; in a report alleged to have been received from the British capital the statement is made to occur: "The list of the losses in officers at Neuve Chapelle increases with each fresh issue. The consternation, throughout the country, is profound, as may be judged by the brief observations which, in some cases, appear in the Press with the endless casualty lists now being published.'

An extract from a report dated Rotterdam 23rd March last is reproduced in the Supplement; therein it is stated that the Nieuwe Rotter-damsche Courant publishes a statement on the strength of a London report to the effect that great preparations were in hand in London and all the large provincial centres for the reception of the wounded from Neuve Chapelle.

These reports of the 20th—23rd March were only a preliminary to the crowning effort of the German Press launched on the 24th *idem*; on this occasion the German Press published a statement to the effect that the British public were clamouring for the truth, which was being hidden from them, to be disclosed to them. References were also made to a public meeting held in Kensington Hall to protest against the

action of the Government in hiding unfavourable news from the Front. In the Supplement to the Revue the order which Prince Rupprecht of Bavaria issued to his Army after Neuve Chapelle is next reproduced in extenso; in this order the Royal Commander alleges that 43 British battalions were employed to oust 3 German battalions from their positions.

To summarize the situation :- Whilst the British claimed, in their version of the fighting, that they had captured German trenches on a front of about 4,000 yards, estimating the German casualties at 16,000 to 17,000 men, and considered the affair from its magnitude as being a battle; on the other hand, in the German campagne morale it is admitted that a battle did take place, but only on the British side; the British Commander-in-Chief is stated to have brought into action some 43 battalions -- 2 army corps—and to have lost 20,000 men at least on a conservative estimate. On the other hand, on the German side, properly speaking, there was no battle; yet, mark you, three German battalions proved sufficient to inflict casualties on the British troops amounting to 20,000 men; after this measure of success the commander of these three battalions generously renounced the idea of retaking Neuve Chapelle, the village being a position of no importance. The documentary evidence yet to be produced can alone make the real situation known. At present all that can be said is that, on this occasion also, the German Headquarters took exceeding good care to prevent any appearance of a success, be it ever so fleeting, on the part of their enemy, being admitted in their accounts of the Battle of Neuve Chapelle.

This part of the Supplement also contains a part of the account relating to the fighting round Hill 60.

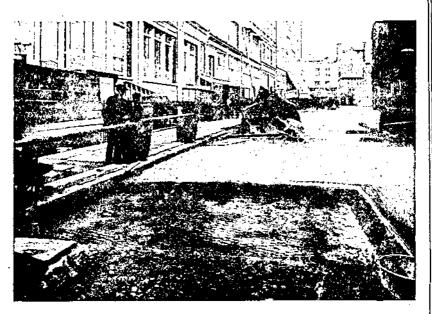
W. A. J. O'MEARA

REINFORCE

CONCRETE ROADS

WITH

EXPANDED METAL



ROYAL BOROUGH OF KENSINGTON. Expanded Steel-Concrete Road Decking at Ball Street.

Mr. A. R. FINCH, A.M.J.C.E., Borough Engineer.

THE EXPANDED METAL COMPANY

Limited.

Head Office: YORK MANSION, YORK STREET, WESTMINSTER, S.W.

Works: STRANTON WORKS, WEST HARTLEPOOL.

PROFESSIONAL PAPERS OF THE CORPS OF ROYAL ENGINEERS.

FOURTH SERIES .- VOL. I., 1905-07.

Paper I.	Simple Tunnel Work on the Mari-Attock Railway, Panjab, by Capt. H. E. C. Cowie, p.s.o., R.E.	ls.
,, III.	Recent Works in the N.W. Frontier Province, India, by Bt. Colonel G. K. Scott-Monerieff, C.I.E., R.E.	3s. Gd.
,, IV.	Armoured Trains, by Capt. H. O. Mance, p.s.o., R.E.	3s. 6d.
,, V.	Reinforced Concrete, by LieutColonel J. Winn, late R.E.	2s. 6d.
., VI.	Fortress Warfare, by Capt. Moritz Ritter von Brunner, Austrian Engineers. Translated by Capt. C. Otley Place, p.s.o., R.E	3s. (d.
,, VII.	Fortresses and Military Engineering in Recent Literature. Heft 43, "Mitteilungen des Ingenieur-Komitees." Translated by Capt. F. A. Buzzard, R.F.A	ěs,
VOL. II., 1968 II.		
Рарки И.	Report on Mechanical Road Transport for India, by Capt. E. N. Mauley, R.F.	2s.
,, III.	The Khushalgarh Bridge, by Capt. H. E. C. Cowie, p.s.o., R.E.	2s. 6d.
,, IV.	The Engineer Troops in the Campaign of Melilla, by General Don José Marvá. Translated by LieutColonel G. M. W. Maedonogh, p.s.c., R.E.	3s. 6d.
,, V.	Works Economics, by Brig. General G. K. Scott-Monerieff, C.E., C.L.E., R.E.	2s.
,, VI.		is. Gd.
FROM 1912 THE PROFESSIONAL PAPERS WILL BE PUBLISHED IN PAMPHLET FORM ONLY.		
PAPER I.	Six Lectures delivered at the Senior Officers' Course, 16-21 Oct., 1911, School of Military Engineering, by Col. J. E. Capper, C.B., Commandant, S.M.E.; LtCol. J. A. Gibbon, R.E.; Major G. C. Kemp, R.E.; Major J. C. Matheson, R.E.; Capt. C. E. P. Sankey, R.E.; Capt. H. Clementi Smith, R.E.	94],
,, II.	Notes on Roofs, With numerous Diagrams and Plates, by Major E. N. Stockley, R.E.	35.
., 111.	The Growth of the Offensive in Fortification. With 18 Plates, by Major J. C. Matheson, R.F.	2s. 6d.
,, IV.	Telephone Transmission. With Diagrams, by Capt. A. D. St. G. Bremner, R.E.	ls. 6d.
,, V.	Stiffened Suspension Bridges. With Diagrams, by Major H. Biddulph, R.E.	2s.
VI.	Notes on Wire Ropes, Chains and Slings, by Licut. H. S. Briggs, R. E.	2s. 6d_

They may be obtained from Messrs, W. & J. MACKAY & Cc., Lyd., Chatham, or of any Bookseller.

THE SILICATE PAINT COMPANY,

J. B. ORR & Co., Limited.

CHARLTON, LONDON, S.E.,

- Manufacturers of -

DURESCO. Washable Water Paint; damp-resisting; cheaper than Oil Paint or Wall Paper.

SILICATE OIL PAINT. Ground stiff in Oil, or ready mixed for use; non-poisonous; finely ground; greater body than White Lead.

ENAMEL PAINTS. High-class Varnish Paints.

History of Submarine Mining in the British Army.

By LT.-COL. W. B. BROWN, R.E.

Post Free to Members of the R.E. Institute, Ss. To Non-Members, Ss. 6d.

From SECRETARY, R.E. INSTITUTE, or the Agents, Messis. W. & J. Mackay & Co., Ltd., Chatham, or any Bookseller.

NOW READY.

VOL. III.

History of the Corps of Royal Engineers,

RV

COL. SIR CHAS. M. WATSON, K.C.M.G., C.B.,

This Volume continues the History of the Corps from Vols. I. and II. by the late Major-General Whitworth Porter, to 1912, and is bound uniform with the other volumes. It contains 418 pages, with Photogravure of the late Field Marshal Sir Lintorn Simmons.

ce: Members of the R.E. Institute, 7/-; Non-Members, 10/6,

G. E. CARRINGTON,

For many years Master Tailor, Royal Engineers,

TAILOR & MILITARY OUTFITTER,

53, HIGH STREET, OLD BROMPTON, KENT,

And at CARLTON HOUSE, REGENT STREET, near Waterloo Place, S.W.

HOURS OF BUSINESS:-

Old Brompton, 8.30 to 7.30; Saturdays, 8.30 to 1. Carlton House, II to 8; Saturdays, II to I.

NOW READY

R.E. Field-Service Pocket-Book.

THIRD EDITION, 1915.

Price to Members of the R.E. Institute, 2s. 6d. per Copy.

The book will also be supplied to W. and N.C.O.'s and men of the Corps at the same price on receipt of Cash with order.

Price to Non-Members of the R.E. Institute, 3s. 9d. per Copy, including postage and on receipt of Cash with order.

SECRETARY, R.E. INSTITUTE, CHATHAM.