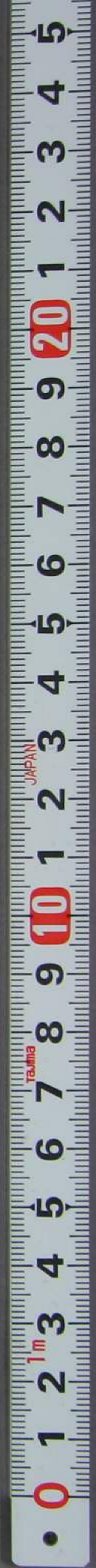


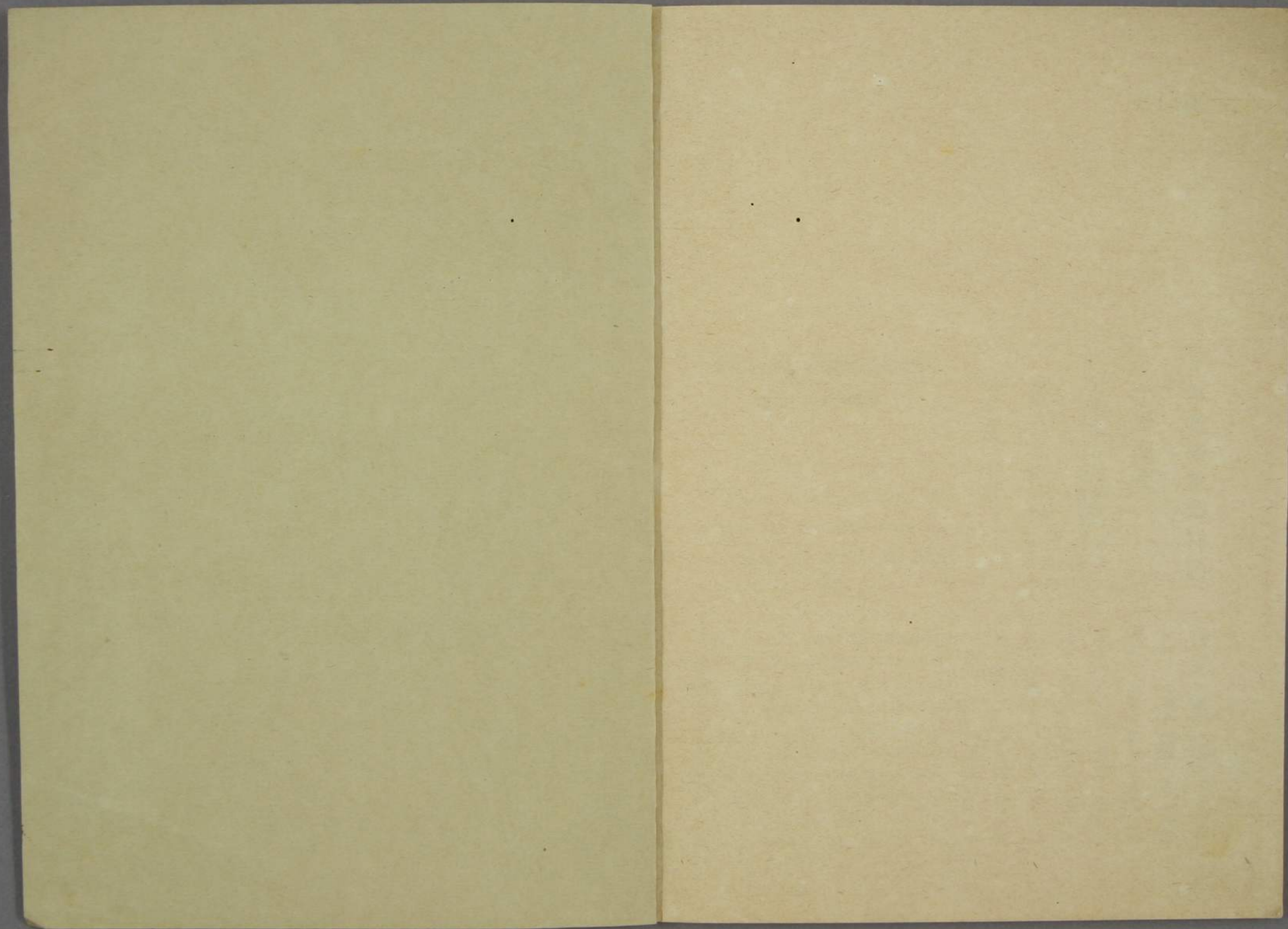
長局信電府政國帝本日
書告報三第
月六年十同至月七年九治明自

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THIRD REPORT
OF
THE DIRECTOR
OF THE
IMPERIAL GOVERNMENT TELEGRAPHS
JAPAN,
FOR
THE FISCAL YEAR ENDED JUNE 30th,
TENTH YEAR OF MEIJI
(1877)

635





Southern Districts, while other portions were undertaken as part of a system of lines which it is proposed to continue or complete during the ensuing fiscal year, according to their relative urgency or importance.

As the construction of the longer of these lines generally extends over a period of one to two years, although the smaller may sometimes be completed during the year in which they are commenced, it would be always advisable, in order to fully understand the details, to take a glance at the report for the preceding year.

Although the amount of receipts for private messages cannot be compared with that of previous years, owing to the temporary stoppage of the traffic during the rebellion, on the other hand the Government traffic shews a considerable increase, both in the number of telegrams and the revenue derived.

Notwithstanding the many extensions, the demand for telegraphs in all directions is still so great that it may be expected ere long the various lines will spread as a network over the Empire, and as to the benefits to be reaped from such a

カ如キハ固ヨリ世人ノ知ル所ニシテ今復タ贅言ヲ用ルニ足ラス然レモ其實際効驗ノ最モ著トシテ隆昌ノ域ニ進ミ遐陬僻邑ニ至ルマテ皆架線置局ヲ渴望スルコト恰モ大旱ノ雲霓ヲ望ム非常ニ多キヲ加フルヲ以テ其收入ノ額ニ至テハ却テ若干ノ増殖アリ抑電機通信之利驥々手ヲ遏止セシニ因テ收税ノ金額ハ平年ノ例ヲ以テ觀ルヘカラスト雖モ之ニ易フルニ官報ノ數ニ出ル者ナリ故ニ宜ク彼此照考シテ其願未ヲ知ルヘシ且本年ノ如キハ擾亂ノ際私報ノ通信告書ニテハ緩ニ其一斑ヲ見ルニ足ルト雖モ其全豹ヲ明了スル能ハス是レ固ニ止ムヲ得サル大ナル者ハ一二年ニ跨越シ其小ナル者モ亦年度ノ境界ニ跨ルコトアルヲ以テ唯一週年間ノ報ヲ得タリ故ニ前年ニ對照比較スレハ工業ノ長進實ニ居多ト云フ可シ然レモ凡ソ架線ノ工其

system it need only be said that the prompt and efficient service rendered in the recent struggle entitle it to be considered as one of the principal causes of the happy results achieved.

The new line from Fukushima (Iwashiro) to Yamagata (Udzen) 60½ English miles in length, having been commenced, and partly carried out, in July of the previous summer, work was resumed on the 15th April 1876, and the remaining portion, 32 miles in length, was completed on the 21st September of the present fiscal year. The building for the permanent Yonesawa office was commenced on the 28th April, and completed on the 1st September.

Moreover, in order to facilitate communication during the silk season, a house was hired at Yamagata, fitted with instruments, and opened as a temporary station on the 15th August. The permanent office building was commenced on the 17th June, and opened for public use on the 1st October, the instruments, etc., being transferred from the temporary office on that date.

The system of lines extending from the Tokei Central police station

明ニシテ
大ニ軍機
ノ神速ヲ
助ケシコ
ハ未タ此
時ヨリ甚
クシキ者
アリサル
ナリ

岩代國福島ヨリ羽前國米澤ヲ經テ同國山形ニ至ルニ一線ノ架設
ナルノ工ハ既ニ九年四月十五日ヲ以テ業ヲ起シ而シテ前年度内ニ於テ稍
落成セシ者凡十有一里殘餘凡十有四里トス其間米澤ニ至ルマテハ七月
十七日落成シ山形ニ至ルマテハ九月二十一日全ク功ヲ竣ス米澤局ハ四
月二十八日之ヲ經始シ其落成ハ九月一日ニ在リト雖モ架線既ニ成リ加
ルニ時方サニ生絲蠶卵紙等ノ國產賣買ノ爲メ飛報ヲ要スル殊ニ多キヲ
以テ假ニ民家ニ就テ機器ヲ裝置シ八月十五日ヨリ通信ヲ開キ信局成ル
ニ迄テ乃チ之ニ徙ル山形局ハ六月十七日之ヲ經始シ稍落成ニ及フナ
以テ十月一日ヨリ通信ヲ開キ十四日ニ至テ造營全ク成ル

十二面方六リヨ局視警

to the 26 branch offices, which was commenced on the 5th June 1876, and thus had been partly erected in the preceding year, was continued and finally completed on the 31st January 1877. The offices, (with the exception of one,) were opened from time to time in the order of completion. Originally the Police Department possessed six telegraph stations only, but the number of new branch offices having gradually increased, they were thus provided with the telegraph, and in lieu of the original Breguet apparatus all were fitted with Morse instruments, having bells for night use.

The erection of a new line of Railway telegraphs, (with 4 wires,) between Kyoto and Osaka, a distance of 27 miles and 1280 yards, and the transfer of the 3 main wires from the highroad, (having been commenced on the 28th May 1876,) were completed on the 4th February 1877. There are 6 Railway stations on this line, namely, Hichijo, Mukomachi, Yamasaki, Takatsuki, Ibaraki, and Suita, but the telegraph offices opened are three in number

六分署ニ連絡一線連絡十八里ニ
 月五日ヲ以テ業ヲ起シ本年ニ連テ工事ヲ執リ先ツ
 其緊要ノ處ヨリ着手シ尋テ各所ニ及ホシ架線建局ノ
 成ルニ随フテ逐順通信ヲ開キ遂ニ本年一月三十一日
 ニ至テ盡ク落成ス然レトモ今現ニ置局スル者ハ本署
 及二十五分署ナリ初メ警視廳ノ信局ハ六分署ノ分廳
 ニ連架セシニ改テ各署ヲ置カレ、ニヨリ非常警備ノ
 用ニ供スル爲メ更ニ其數ヲ増加セシナリ通信機器モ
 從前單鐵機ヲ用ヒシカ今改テ莫爾斯印字機ニ換ヘ且
 電鐘ヲ備設シ以テ不時送信ノ號報トナス

西京大坂間十一里鐵道電信
 線四條及本線三條ヲ架設ス
 ルノ工ハ九年五月廿八日起
 業シ本年二月四日ニ至テ全
 シ成ル停車場ハ七條向日町
 山崎高槻茨木吹田ノ六處ニ
 アリト雖モ現ニ通信ヲ行フ
 者ハ七條山崎高槻ノ三處ノ

only, viz: Hichijo, Yamasaki, and Takatsuki.

The construction of the new line between Nagoya, (Owari) and Tsu, (Isé) via Yokkaichi, (a distance of 51 miles, 200 yards), which was surveyed merely during the last fiscal year, was commenced on the 3rd July 1876. The section between Nagoya and Yokkaichi was completed on the 31st October, together with the offices at those places, and opened to the public on the 1st December. The works on the remaining section between Yokkaichi and Tsu were interrupted during the agrarian riots which began on the 19th December in the Miye-ken, many houses in the town and neighbouring villages having been burnt or destroyed. On the 20th the rioters came to Yokkaichi, attacked such buildings as the Town-hall, Police stations, &c, and broke into the telegraph office, to which they set fire. Many poles were burnt or considerably damaged, but the Instruments and important documents were immediately secured from harm by the exertions of the staff in charge of that station.

尾張國名護屋ヨリ伊勢國四日市ヲ經テ同國津ニ至ル二十里ノ一線ハ前年度中ニ在テ纔ニ測量ニ着手シ九年七月三日ヨリ架設ノ工ヲ起シ四日市津ノ兩處ニ各一局ヲ建造ス名護屋四日市間ノ架線信局ハ十月三十一日落成スルヲ以テ十二月一日先ツ其通信ヲ開キ尋テ津局ニ及ホサントス是月十九日三重縣下ノ農民嘯聚亂ヲ作シ所在村落屋ヲ毀テ火ヲ放ツ二十日四日市ニ亂入シ區務警察等ノ各處ヲ破壞シ電信局ニ迫ル局員急ニ機械及緊要ノ簿書ヲ保護シ以テ其害ヲ避ク暴徒火ヲ局中ニ放チ又電柱ヲ亂斫燒燬シ兇暴至ラサル所ナシ是ヲ以テ一時其工業ヲ止ム暴徒鎮定スルニ及ントテ即時其被害ノ柱杆ヲ點檢シ二百餘根ヲ更植修理シ將ニ速

As soon as the riots were suppressed, an inspection of the line was made, and the necessary repairs, including renewal of about 200 damaged poles, were speedily executed. A temporary office at Yokkaichi on the original site, was completed on the 16th January, and at once opened so as to restore communication. The damages on that portion of the line already erected between Yokkaichi and Tsu were thoroughly repaired, and the remaining portion on which the construction had not previously been carried out, was completed on the 31st January. An office at Tsu was opened for traffic on the 15th February 1877. Subsequently a new permanent office was built at Yokkaichi and completed on the 16th May 1877.

The Baniu river (Sagami) was originally crossed by aerial wires, in a span of about 450 yards, and several interruptions occurred during storms, and from other causes, in consequence of which a subterranean cable containing 4 conductors was laid in 1875. But it was subsequently found that some imperfec-

セリ 開業ス後四日市局ヲ新建シ五月十六日落成
一月三十一日全ク功ヲ竣リ二月十五日之ヲ
ノ柱線ヲ修理シ且殘路ノ柱杆線條ヲ建架シ
行フ而シテ津ニ至ルマテノ線路モ亦其損害
一月十六日ニ至テ成ル乃チ舊ニ依テ通信ヲ
ニ屬スルヲ以テ姑ク其趾ニ就テ假局ヲ造リ
ニ通信ヲ復セントス然ルニ信局ハ悉ク鳥有

相模國馬入川ノ電線ハ初
メ川上ニ跨架シ距離四町
多ク電柱ヲ用ヒサルヲ以
テ風雨其他ノ妨碍ニヨリ
テ時々抵觸ノ患アリ於是
試ニ四條ノ水底線ヲ埋メ
以テ其利害ノ如何ヲ見
ト欲シ既ニ八年中實地ニ
之ヲ施セシカ尙ホ意外ノ

tion existed, resulting in stoppage of communication, and aerial wires were again suspended, in October 1876, since which time their condition has been satisfactory.

In March 1876 a good route was discovered for a submarine cable between Shibukawa, in the province of Bizen and Nomura, in Sanuki, (where the strait is only 6 1/4 miles wide,) to connect the Shikoku island with the mainland of Nihon, and in November the work was commenced, the Government steamer "Meiji-maru" being employed as a cable ship, with a number of native sailing boats to assist her. By the 28th all preparations had been completed, the submerging of the cable was commenced, and on the 3rd of December communication was established. The cable is mainly of the known as "Atlantic deep sea," with heavy shore ends:—a test made immediately after submersion showed the insulation to be satisfactory. Three buoys were laid to point out the position, and to guard against the anchoring of vessels in dangerous proximity. Although the distance across the straits is so short,

障礙ヲ起シ電
氣漏泄シテ竟
ニ實益ヲ得ル
ヲ能ハス因テ
九年十月十三
日復タ改メテ
架空線トナシ
翌日功ヲ竣ス
爾後通信頗ル
佳ナリ

備前讀岐間海底沈線一線二ノ擧ハ九年三月ヲ以テ線路ヲ測定シ尋テ兩海岸
ニ線室ヲ建造シ同年十一月ニ至リ沈線ノ工ヲ起ス此工事ニ着手スルヤ明治
艦ヲ以テ架線ノ本艦トナシ別ニ數十隻ノ運船ヲ具ヘ其數隻ヲ維連シ以テ施
工ノ用トナス器械ノ準備盡ク整フルニ及ンテ二十八日先ツ乃生村線室ヨリ
淺海線ヲ下シ連テテ深海線及ヒ澁川村海濱ノ淺海線ヲ沈メ其兩端ヲ接續シ
十二月三日ニ至リ全ク功ヲ竣ル於是電氣ノ流感ヲ試驗セシニ氣流十全通信
意ノ如シ乃チ線路ノ位置ヲ標示スルカ爲メ浮標三箇ヲ置キ其近傍ニ在テ船

the operation was extremely difficult, owing to the strong currents; fortunately, however, the weather was propitious, and the best attention of the Engineering staff having been given to the works, all was brought to a successful termination. As soon as the cable operations were finished, preparations were made to proceed with the erection of a land line, (of one wire,) from Shibukawa cablehouse to Okayama, (a distance of 24³/₄ miles,) so as to form a junction with the main line; and also to erect a line and establish 6 stations on the island of Shikoku, viz: Marugame, Tokushima, Takamatsu, Matsuyama, Uwajima and Kochi. The survey of the lines between Okayama and Shibukawa, and from Nomura as far as Marugame, was commenced in January 1877, but as it became very desirable to open communication with Shikoku on account of the Kagoshima insurrection, officers of the Engineering staff were speedily despatched to each of those Districts. The construction of the line between Shibukawa and Okayama, was commenced on the 22nd February 1877; and completed (in

シ工手ヲ兩地方ニ分テ澁川岡山間ハ二月二十二日起業同二十七日落成シ
柱ニ着手セントス此時ニ當テ鹿兒島ノ警報方ニ急ナリ因テ之ヲ督促
ノ六處ニ信局ヲ置ントス岡山丸龜ノ間ハ一月ニ測量ヲ卒リ將ニ建
東西諸線通信ノ脈絡トナシ四國ノ地ハ丸龜高松徳島松山宇和島高知
ヲ得タリ海線既ニ成ル乃チ澁川村ヨリ陸路八町十岡山ニ接線シ以テ
起ラス且工手ノ電勉力ヲ用ルニ因テ如是ノ大業モ亦易々功ヲ奏スル
船ノ投錨及網漁等ヲ爲テ禁ス抑此海峽タルヤ距離才ニ二里餘ニ過キ
ス潮汐干満ノ候ニ方テハ流勢急駛ナリト雖モ作業ノ際風日温和波濤

a temporary manner,) on the 27th of that month. Further, a line of 2 wires between Nomura and Takamatsu having Marugame in circuit, was commenced on the 2nd March, and completed as far as Marugame on the 4th; and to Takamatsu on the 9th of the same month.

As the transmission of private messages over the lines had been prohibited prior to this date, the stations of Marugame and Takamatsu were temporarily opened on the 11th March for Government messages only, the Marugame office being provided at the Military Barracks. The communication by submarine cable having been suddenly interrupted during the same month, the native electrician was sent in May to examine it, and his tests shewed the cable to have been severed. On raising it to the surface it was found that it had been cut with some sharp instrument, probably by native fishermen. The cable was repaired and communication restored; a guard boat now watches it day and night to prevent a recurrence of the mishap.

In accordance with special orders

乃生村ヨリ一端ハ丸龜五里ニ向ヒ二線ヲ架シ三月二日起業同四日ニ至テ成
ル其一端ハ高松リ乃生村ヨリ三里餘ニ向フテ一線ヲ架シ以テ丸龜ノ一線ニ連接シ三
月五日起業同九日ニ至テ成ル是ヨリ先キ私報ノ通信ヲ停過セシカ故ニ此
二處ハ架線成ルニ隨テ假局ヲ設ケ營内ニ假設ス分三月十一日ヨリ官報ノミ
ノ通信ヲ開ク本年三月海線頓ニ阻碍ヲ生シ電氣中絶ス五月技手某ヲ遣シ
テ之ヲ修理セシム因テ其害所ヲ點檢セシム乃チ以テ截斷セシ者ノ如シ蓋
シ船人ノ所爲ニ出ルナラン乃チ之ヲ接續シテ舊ニ復シ五月十五日竣功忽
チ全通ス爾後看守船ヲ備ヘ晝夜線路ヲ巡視シテ之ヲ保護セシム

issued by the Minister, on the 18th February 1877, to open telegraph communication with the Anzaisho, (Imperial palace,) at Kioto, a line with one wire was erected between the palace and the Kioto telegraph office, (a distance of 2 miles and 316 yards,) and a set of Morse apparatus was fitted at each place. This line was open for communication only during the stay of the Court.

The erection of a line, with one wire, between the Tsukiji office and Ministry of War, (a distance of about 2½ miles,) was commenced on the 20th January and completed on the 13th February, Morse apparatus was fitted at each place. Communication was opened on the 14th.

In April, the Ministry of Foreign Affairs having been temporarily established at Yen-rio-kan, (after the fire of February which consumed the original offices,) a new line of one wire was provided from the Tsukiji office to that place. The work was commenced on the 10th April, and completed on the 23rd of the same month; and Morse apparatus fitted at the Foreign Office.

二月十八日命アリ西京行在所ニ信
局ヲ置シト即日起業シテ同所電信
分局本年一月察テ廢シテ局ヲ置カ
トナス故ニ此以テ各局ヲ稱シテ分
後分局ヲ書スニ連接スル爲メ一
線ヲ十七町餘架シ新柱若干ヲ樹テ
二十日兩局ニ莫爾斯印字機各一基
ヲ裝置シ即日通信ヲ行フ是ヨリ先
キ車駕西京ニ幸シ尚ホ駐輦
アラセラルハナリ
陸軍省ヨリ築地電信分
局ニ至ル三町ノ間ニ一
線ヲ架設シ省內ニ一
日ヨリ起業シ二月二十
日ニ至テ成ル此柱多
ハ現柱ニ兼架シ新植セ
シ者ハ僅ニ數根ノミ兩
局ニ莫爾斯印字機各一
基ヲ設ケ翌十四日ヨリ
通信ヲ開ク
本年二月外務省祝融ノ災ニ罹リ
四月廳ヲ延邊館ニ移サル因テ同
省ノ請ニ應ジ從前ノ線路ヲ廢シ
更ニ築地分局ヨリ同館ニ
線ヲ連接シ莫爾斯印字機一基ヲ
置ク此工四月十日起業同二十三
日竣功セリ

An additional wire was run on the existing poles between the Kobusho, Shinbashi Railway station, and Tsukiji office, (a distance of 2 miles and 94 yards,) and Morse sounders fitted at each place to open communication between those offices. The work was commenced on the 16th April, and completed on the 21st of the same month.

An additional wire was run on the existing poles between the Yokohama Railway station and the telegraph office of that town, a distance of 1020 yards, and Morse sounders fitted at each place. The work was commenced on the 24th April, and completed on the 1st May 1877.

An additional wire was also run on the existing poles between the Kobe office and Railway station, and on to the station at Sannomiya, (the latter about one mile from the Kobe office). This work was commenced on the 2nd April 1877 and completed on the 11th of that month. It was also proposed to provide similar means of communication between the Kawaguchi and Koraihashi offices and Umeda Railway station,

工部省内電信分局ヨリ新橋鐵
道停車場電信分局十五及ヒ築
地電信分局新橋ヨリ十六ニ一
線ヲ増架シ先ツ省中及築地分
局ニ聽響機各一基ヲ裝置シ兩
局間ノ通信ヲ開ク此工四月十
六日起業同二十一日落成セリ
横濱電信分局ヨリ同所
鐵道停車場電信分局ニ
至ル八町三ノ間ニ一線
ヲ増架シ聽響機各一基
ヲ裝置ス此工四月二十
四日起業五月一日竣功
セリ
神戶電信分局ヨリ同所鐵道
停車場及三ノ宮停車場電信
分局神戶停車場マテ十五町六
間餘ノ間ニ一線ヲ増架ス
此工四月二日起業十一日竣
功ス大阪川口高麗橋兩分局
ヨリ梅田停車場ノ間モ亦當
ニ増架スヘキノ所トス然ル

(Osaka,) and, as one spare wire existed, it was made use of accordingly.

A new wire was run on the existing poles between the telegraph office and the Railway station at Kyoto, a distance of about 3 1/2 English miles. The work was commenced on the 29th May, and completed on the 31st of the same month, and Morse apparatus fitted at each place.

At the request of the Naval Department, a series of lines of poles and wires was erected at the Powder Magazine at Shirokane, in Tokei, (to be made use of in testing the quality of the powder,) and a number of terminating screws were fixed on each of the poles. This work was commenced on the 24th April and completed on the 17th May.

The preliminary sanction for an extension line, with two wires, between Tokei and Niigata, (Yechi-go,) a distance of about 266 English miles, and for the erection of telegraph offices at the following places, viz: Kumagai, Takasaki, Uyeda, Imamachi, Kashiwazaki, Idzumosaki, and Niigata, was obtained on the 19th January 1875, but the work was postponed, the staff being ful-

用	之	乃	以	ル	ノ	備	ト	ニ
フ	チ	チ	テ	ル	ア	線	豫	舊
業	此	響	間	局	所	西	火	大
三	工	機	一	ニ	鐵	京	藥	阪
十	五	各	線	至	道	電	ノ	高
一	月	一	ヲ	ル	停	信	試	麗
日	二	基	増	一	車	分	驗	橋
竣	十	ヲ	架	里	場	局	用	電
功	九	裝	シ	十	電	ヨ	ト	至
セ	日	置	テ	二	信	リ	シ	至
リ	起	ス	シ	十	分	同	テ	至
功	四	器	ニ	京	軍	火	海	至
セ	日	ヲ	線	府	兵	藥	東	至
リ	起	設	條	下	器	ノ	東	至
	業	ク	ヲ	白	局	請	東	至
	五	此	架	銀	ノ	ニ	東	至
	月	工	シ	火	請	應	東	至
	十	四	毎	藥	ニ	シ	東	至
	七	月	柱	庫	應	テ	東	至
	日	二	電	地	シ	テ	東	至
	竣	十	極	内	東	海	東	至
延	工	リ	月	出	シ	ル	東	至
推	業	然	十	雲	熊	凡	京	至
シ	夥	ル	九	ノ	谷	八	ヨ	至
テ	多	=	日	舉	高	百	リ	至
九	ナ	當	稟	ハ	崎	里	越	至
年	ル	時	議	初	新	越	後	至
七	ナ	允	初	メ	瀧	後	國	至
月	以	准	メ	明	=	國	新	至
=	テ	ヲ	治	治	各	新	瀧	至
至	竟	架	八	一	一	瀧	二	至
リ	ニ	設	年	置	局	二	線	至
	ノ	ヲ	一	置	ヲ	架	架	至

ly occupied at that time in other new and repair works. It was however resolved, in the month of July 1876, to proceed with the work as far as Takasaki, and the governors of Saidama-ken and Gunba-ken having requested that telegraph offices might also be established at Urawa and Maibashi, the Government granted their petitions, and two constructing parties were appointed. One party commenced work on the 14th January 1877, and completed the section between Nihonbashi, (Tokei,) and Urawa, (about 16 miles) on the 22nd May, proceeding towards Takasaki, distant 54 English miles, via Kumagai; (which section, though incomplete, was in an advanced stage;) the other party commenced work on the section Takasaki to Mayebashi, (6 miles and 400 yards,) on the 10th May and completed on the 23rd June. The offices had not been opened at the date of this Report, as the buildings were incomplete.

A line with one wire was erected partly on new poles, and partly on existing poles of the Imperial Mint line, between the Koraihashi office

落	リ	崎	四	一	縣	ニ	始
成	前	二	日	ハ	ヨ	琦	メ
ス	橋	十	ヨ	日	リ	玉	テ
信	八	一	リ	本	京	縣	着
局	町	里	工	橋	稟	下	手
ハ	里	二	ヲ	ヨ	請	浦	ニ
現	十	二	起	リ	シ	和	決
ニ	二	日	シ	線	乃	群	シ
建	至	五	五	路	チ	馬	先
造	ル	月	月	ヲ	之	縣	ッ
中	マ	二	二	取	ヲ	下	高
ニ	テ	十	十	リ	許	前	崎
ア	五	日	二	浦	ル	橋	ニ
ル	月	日	日	和	於	各	一
ヲ	十	猶	落	一	是	局	マ
以	日	猶	成	六	技	ヲ	架
テ	コ	建	ス	町	手	置	線
未	若	築	尋	十	ヲ	カ	セ
タ	手	中	テ	二	兩	レ	ン
通	シ	在	熊	至	地	ン	ト
信	六	リ	谷	ル	二	分	欲
ヲ	月	ハ	チ	マ	月	派	大
開	二	高	經	テ	十	シ	阪
カ	十	崎	テ	高			高
ス	三	ヨ	高				麗
	日						橋
工	局	一	務	所	信	大	電
ハ	ヲ	線	所	征	分	阪	
六	設	ヲ	八	討	局	高	
月	ク	架	間	陸	ヨ	麗	
二	ル	シ	餘	軍	リ	橋	
日	ノ	信	ニ	事	同	電	

and the Branch War Office in Osaka, a distance of about 1½ English miles, a temporary telegraph station was provided in the premises of the latter office, and a set of Morse apparatus fitted at each end. This work was commenced on the 2nd June and completed next day, the office being opened to meet special requirements originating in the Satsuma rebellion.

The preliminary sanction for an extension of line from Kumamoto to Kagoshima, via Sashiki, (Higo), a distance of about 150 English miles, (having a station at each of the places named,) was obtained on the 19th January 1875, the work, however, was not proceeded with, owing to various causes.

From the month of February 1877, when the rebellion broke out in Satsuma, the Government telegraphs were of great value and importance to the War Department as a means of rapid communication; the Kumamoto office was especially useful, it being situated just where protection was most needed. On the 18th of that month, shortly after the outbreak, this office was tempo-

起業翌三日竣功ス其柱杆半
ハ新植シ餘ハ造幣局線ノ現
柱ニ兼架シ而ノ兩局ニ莫爾
斯印字機各一基ヲ裝置ス此
局ヲ設ル所以ノ者ハ薩賊征
討ノ事件ニ係ルナリ

熊本電信分局ヨリ肥後國佐敷ヲ經テ薩摩國鹿兒島
凡五ニ二線ヲ架シ兩處ニ信局ヲ置ノ議ハ初メ明治
八年一月十九日允准アリ然ルニ故アリテ未タ其工
業ヲ興サス本年二月鹿兒島逆賊ノ亂起リシヨリ軍
機ノ急報盡ク電機ヲ藉テサルコトナク而ノ熊本分局
ハ其要衝ノ地ニ當ルヲ以テ最モ緊急ノ務ニ盡力セ
リ賊兵ノ將ニ熊本ニ亂入セントスルヤ十八日假ニ

rarily removed from Shinmachi to the Military Barracks within the castle, it having been so agreed upon with the Army Department. On the 19th war was declared, and the Imperial army marched on the 21st to contend with the enemy at the mouth of the Kawajiri river; the same day the town caught fire, and the permanent office at Shinmachi was destroyed during the night, communication being thus interrupted by the breaking of the wires. The garrison now determined to defend the Kumamoto castle, and the members of the staff in charge of the Kumamoto office took up their quarters within its walls.

In the meantime a native Inspector, Seike, fitted the instruments temporarily at a comparatively safe point on the line in the neighbourhood of Kurume, and gradually extended communication southwards to one village after another on the dates named in the following table:—

Haramachi,	opened 23 rd Feby, closed 24 th .
Minaminoseki,	opened 24 th Feby, closed 29 th Apl.
Funakuma,	opened 9 th March, closed 16 th .

信局ヲ鎮臺營中ニ移スノ約ヲ成シ機械物品ヲ移シ十九日ヨリ官信ノ
通報ヲ行ヒ新町ニ在ル分局ヲ閉ツ同日征討ノ勅ヲ下サレ二十一日開
戰賊ヲ川尻口ニ邀撃ス市街火トナリ煙焰天ニ漲ル此夜新町ノ分局モ
亦兵燹ニ罹リ電線斷絶ス臺兵城守ニ決シ局員亦タ城中ニアリ於是四
等技手補清家茂信ヲシテ久留米地方線路ノ全キ所ニ就テ假ニ機械ヲ
裝置シ以テ急報ニ備ヘ又タ官軍戰線ノ進ムニ隨ヒ電線ヲ引テ之ヲ伸
〜以テ急信ヲ便ニス乃チ其局ヲ置ク所ノ地原町同二月二十三日開南關

Konoha, opened 16th March, closed 2nd May.

following up the advance of the Imperial army, so as to facilitate the transmission of urgent Government messages.

Field telegraphs were also constructed by the Army Department, and a number of offices provided at different positions during the progress of the war, in order to preserve communication between each of the Army Divisions. These telegraphs being used by the Army Department, were called "Gunden" (war telegraphs) and the offices opened under the control of the Army Department were as follows:

† Funakuma, opened 14th March, closed 16th.

Takase, opened 14th March, closed 2nd May.

Yamaga, opened 29th March, closed 4th April.

Koyanagi, opened 5th April, closed 10th.

† Konoha, opened 16th March, closed 2nd May.

Kamikonoha, opened 16th March, closed 17th April.

† Offices jointly controlled by Kobusho.

月九分及團ヲ四二
四日ッフ軍工。月月
日開其其機部二二
閉四地軍ノ直十十
小ハ團傳ノ轄九四
柳則ノ報ノ日日
同四ヲ電ヲ局閉開
十月船信爲ト船熊
日五熊ナルナ熊
閉日四工ルヲ三
開日部ヲ陸十月
木開ノ以處軍六九
ノ同局テ之地々日日
葉十兼之勢團閉開
六工六用ヲ畧ノ便テハ五三
日部日三畧シ便宜ニ又別ニ日六
開ノ閉月テ軍電ト局電機開
五局十高電ト日ヒ以置ヲ設等
月兼高瀬ト日四以キ遂ケナ
二用瀬ト日四以キ遂ケナ
日三五三ト日四以キ遂ケナ
閉月月日局電機ヲ設ケナ
上日四以キ遂ケナ
木閉日工遂ケナ
ノ開工遂ケナ
葉山部ニ以リ
七三鹿ノ數テ是
日月二三局十各ハ
開十十月ニニ旅則

Nanamoto, opened 22nd March, closed 17th April.

Minamidashima, opened 10th April, closed 16th.

Yoshitomi, opened 12th April, closed 13th.

Tsumagoye, opened 13th April, closed 17th.

Tarumi, opened 11th April, closed 16th.

* Kumamoto, opened 17th April.

Ojima, opened 23rd April, closed 14th June.

* Hiaku-kawishi, opened 14th June.

* Kumanosho, opened 23rd April.

Matsubashi, opened 8th May, closed 14th.

Miyanojima, opened 16th May, closed 9th June.

* Yatsushiro, opened 10th May.

* Sashiki, opened 19th May, closed 14th June.

reopened 18th June.

* Hitoyoshi, opened 24th May.

* Minamata, opened 8th June.

Fukatose, opened 18th June, closed 21st.

Nio-gi, opened 14th June, closed 18th.

* Still open at date of this Report.

日二俣閉九百十十七四
閉十開六日貫七三日月
四同月八石日日閉十
大上八代開六閉開七
口日開五々月同元
日六深局月局十滿開三
開月渡中十中四水四月
々二瀬日日同四月二
局十同六開隈十月十二
中四二月佐ノ六十日二
御十十敷庄日一閉日
船一八閉五日四閉日南
六五日再月開月開田
月月閉開六十同二熊島
* Kumanosho, opened 23rd April.
五十五王十日三即四月
閉日木八開松今月六十
開同六日六橋開十日
濱十月開月同五局七閉開
町八十々十月中日吉
* Sashiki, opened 19th May,
閉五日四局四四八開富
開月閉日中日日日小同四
局九開人閉開島十月
中日小吉宮六四三十
* Minamata, opened 8th June.
馬河日六ノ月月日二
見內開月原十二閉日
原一六々二日五四十開
日六日月局十開月日三妻
開月開二中四六十閉日越
同一同十水月六開月四

the latter place. Inspector Seike was ordered to commence from the Kumamoto end, and Inspector Nagayama and three others were sent from Tokei to commence from the Kagoshima end, so as to push on with the work as fast as possible, but it having been reported that the rebels were still at times in possession of the road, Nagayama and his party were ordered to return to Kumamoto about the end of May. In the meantime the survey, from Kumamoto to Yatsushiro (distant about 30 miles,) had been completed and the construction commenced. Nagayama and his party therefore undertook the construction of that portion lying between Yatsushiro and Sashiki, (about 20 miles.) The work was carried on by both parties almost night and day, and on the 15th June the line was completed from Kumamoto as far as Yatsushiro, where a temporary office was established, and the transmission of Government messages commenced. The continuation of the line to Sashiki, though not actually completed at the end of the month, was expected

及九州地方ノ我各分局ニ事務官吏建築通信兩技手ヲ發遣セシ
ト雖モ當ニ日ナラズシテ功ヲ竣スヘキナリ擾亂以來軍團電信
マテ落成假局ヲ置キ即日官報ノ通信ヲ開ク未タ佐敷ニ達セス
ナ執リ各夜ヲ以テ日ニ繼キ速成ヲ期ス六月十五日八代ニ至ル
ヲ畢リ正ニ架設ニ着手ス因テ長山伸誠ハ八代ノ工事
五月末旬ナリ是ヨリ先キ熊本ヨリ八代マテ六十町ハ既ニ測量
賊徒尙ホ其間ニ出沒スルト聞キ更ニ轉ノ熊本ニ赴カシム時ニ

to be finished in a few days. The number of officers, constructors, and operators despatched to Kiushiu since the out-break of the rebellion, whether for working the Army telegraphs or for our own stations, was 112.

The great benefits conferred by the telegraphs, and the advantages of being able to construct them speedily in cases of emergency, have never been more thoroughly exemplified than on this occasion.

In accordance with an order from the Minister, dated 2nd June, to erect a line of one wire from Kokura to Oita, (Bungo) via Nakatsu, (Buzen) a distance of about 30 miles, and to establish an office at each of the latter places, Inspector Nagasawa and 4 others were despatched to that district immediately, and on the 13th June the survey and construction were simultaneously commenced, and prosecuted thenceforth with great rapidity. The works have already progressed so far, (at the date of this report,) that although commenced only a few days since, the construction has now been nearly completed to Nakatsu. This line was also required for operations

謂フヘキナリ
リテ非常ノ功ヲ収ムル者ト
過ル者ナシ蓋シ非常ノ事ア
線ノ速成ヲ觀ルニ亦此工ニ
此時ヨリ甚シキ者アラヌ架
ン電信ノ功用ヲ顯ハス未タ
者今現ニ一百十二名トス而
小倉電信分局ヨリ豊前國中津ヲ經テ
豊後國大分里十三ニ一線ヲ架シ兩處
ニ各一局ヲ置クヘキ旨六月二日命ア
リ乃チ急ニ三等技手三級長澤俊平外
四名ヲ遣シ十三日ヨリ測量架線並ヒ
施シ最モ其工程ヲ促ス故ニ其日タル
尙淺シト雖モ殆ト將ニ中津ニ達セン

connected with the suppression of the rebellion, hence the haste displayed in its construction.

In addition to the works heretofore detailed, a large number of repairs and alterations have been executed in various parts of Tokei during this fiscal year, such as the renewal of decayed poles and other damaged material, the removal of poles from one position to another, the fitting of electric bells for different purposes, etc; but as these were comparatively of minor importance, it is sufficient merely to give a list of them, with few exceptions, in an abridged form as follows:

A new survey made from Urakasumigaseki to Kojimachi to replace the old line by the Sakurada Horibata route. Four new wires erected on the existing poles from Sakurada to the corner pole at the Gaimusho (Foreign office), and on new poles from the Gaimusho to the Akasaka police station; two new wires on existing poles between the Akasaka police station and Yotsuya office. The work was commenced on the 12th October, and finished on the 13th November 1876.

トス此電 東京府下線ヲ更築修理セシ者無
線ヲ架設 慮數十件而ノ其事タルヤ或ハ腐
スル所以 朽ノ柱杆損害ノ物品ヲ更新シ或
ノ者モ亦 ハ事故ニ因テ柱杆ヲ轉植シ或
ヲ賊徒征 電鐘ヲ備設スルノ類頗ル瑣末ニ
討ノ事ニ 渉ルヲ以テ一々之ヲ記スルニ足
係レルナ ラス但其中ニ就テ稍ヤ記スルニ
リ 示スノミ 者數項ヲ掲ケ以テ大概
盡ク落成セリ 工十月十二日起業十一月十三日

The survey from the Yorodzuyobashi to the Hongo office was altered, and poles and wires from Matsuyecho, across the front of the Kanda temple at Yushima Ichome, removed, and erected alongside the Kandagawa, passing close to the school at Yushima Shichome, as being more convenient for connection with the Hongo office and the new police lines. The work was commenced on the 29th August, and completed on the 11th September 1876.

The portion of the Kaitakushi line from Saiwaibashi-soto to the temple of Zojoji at Shiba was removed, and a new wire erected on existing poles between Shiodome and the police station near Shiba-Daimon and thence to the Kaitakushi office. This work was commenced on the 2nd October 1876, and completed on the 4th of that month.

A new survey was made in Tokei, under which it is proposed to carry the bulk of the existing scattered lines on a trunk line of poles, clear of the main thoroughfares and buildings, free from the risk of fire and other accidents, thus simplify-

本郷電信局ニ至ルノ線路ハ初メ萬世橋
ヨリ神田社前ヲ横過シテ局ニ連達セシ
ニ適マ警視各署ノ線ヲ架スルニ因テ之
ヲ兼架シ以テ兩ナカラ其便ヲ得ンヲ
圖リ九年八月改メテ橋畔ヨリ神田川ニ
沿ヒ女子師範學校ノ左側ヲ經由ノ以テ
局ニ至ラシム此工其二十九日起業九月
十一日竣功セリ
開拓使支廳ニ接スルノ線路
ハ初メ幸橋外ヨリ日影町ノ
背路ヲ經過シテ芝増上寺ノ
側ニ至リ以テ支廳ニ達セシ
ニ更メテ潮留以南芝大門前
ノ警視署ヲ經テ而メ支廳ニ
達セシム此工九年十月二日
起業同月四日落成ス
府下架線ノ形狀ハ枝
條四方ニ分カレ街衢
ノ間殆ト蛛網ノ如シ
故ニ修理守成ノ方法
ニ於テ獨リ其便ヲ關
クノミナラズ動モス
レハ火災ノ厄ニ罹リ
或ハ不慮ノ障礙ヲ被
ムルヲ亦甚シトナサ
ス因テ務メテ家屋ニ
離隔シ通衢ニ接近セ
サルノ地ヲ擇ヒ數條

ing the system, and reducing the cost of repair and maintenance in future. The survey was completed on the 7th June 1877, but no poles had so far been erected.

Repairs or renewals of numerous poles and wires damaged or destroyed by the fire which occurred at Sukiya-cho, and spread, to the vicinity of Shintomi-cho, Tsukiji, in the month of November 1876, were executed, and one set of Morse apparatus was fitted at a temporary police station erected on the Shiba Sakamotocho, route, as the original building at Irifunecho had been burnt.

Morse instruments were fitted at the Kobusho and Yokohama, thus forming a direct connection between those offices, (making use of the spare wire erected between the Kobusho and the Shinbashi Railway station for the time current arrangement, in the year 1875,) with the object of facilitating the direct transmission of urgent Government messages, during the Satsuma rebellion.

A new wire of short length erected between the Godown and school

チ一柱ニ綜括
シテ以テ永久
保全ヲ計チ成
サント欲シ五
月三十日ヨリ
先ツ實地ヲ測
量セシメ六月
七日ニ至テ之
チ卒フ然レモ
尙未ダ建柱ニ
着手セス
此署ニ地多線方失九年
ニチ罹入シ條ニシ延十一
莫爾設リ舟ノ燬傷ヲ被ムル者柱杆
斯機一基ヲ置クテ假災築最
テ一ニ其備車部正
急基接線線場省午
報ヲ續端一ト内報
送置シチ横アノ電辰
受キ之兩濱アリ局ト用ノ爲
ト直ニ莫濱電西南架スル所ノ
ナ接爾濱電局ノ騷擾ノ際豫
テ以各端際
ル考實生テ架一ノ枝庫
トノ試業徒電信以線間校ト修
ス用スチノ信以チニト修

at Shiodome, to be employed in training the students.

Beside the above a large amount of work was executed at various parts of the Nagasaki and the Awomori lines, such as the renewal of decayed poles, and damaged or broken material, the reconstruction of certain portions, the removal of poles and struts in the road-way and near buildings, and the execution of repairs necessitated by fire and storm. These works being of a minor nature, no special mention of them is necessary, excepting the few cases detailed below:—

The Ichinoseki office was burnt on the 10th May 1876, the rebuilding commenced in the month of March 1877 and was completed on the 18th June.

The Shidzuoka office was burnt on the 30th December 1876. The rebuilding had not been commenced on the date of this report.

The Awomori office was burnt on the 30th April 1877, and the rebuilding had not been commenced.

These offices were destroyed by fires originating in the neighbourhood, temporary offices were erected

長崎線及青森線各區中柱杆ノ腐朽
及器械物品ノ毀損セシ者或ハ建築
ノ堅牢全備ナラサル者或ハ道路家
屋ノ妨トナル者或ハ風害火災ニ罹
リシ者等之ヲ更築修理セシテ無慮
數十項是亦尋常瑣々ノ事業ニ涉ル
チ以テ之ヲ叙記スルニ足ラス唯
其祝融ノ災ニ罹リシ者及ヒ其佗一
二ノ事項ヲ左ニ摘載スルノミ
八日落成ス
シテ六月十
月之ヲ再建
亡シ本年三
五月十日燒
分局ハ九年
一ノ關電信
靜岡分
局ハ同
青森分
局ハ本
局皆其市
以上ノ三
年四月街火ヲ失
三十日スルニ因
燒亡シテ其災ニ
未ダ建
造ニ若
レモ罹災
手セス
ノ後直ニ
ス
着
手
セ
ス
建
造
ニ
シ
タ
ル
日
未
タ
燒
亡
シ
タ
ル
三
十
日
ス
ル
ニ
因
テ
其
災
ニ
未
ダ
建
造
ニ
若
レ
モ
罹
災
ス
着
手
セ
ス
ノ
後
直
ニ
ス

at once, and no delay occurred to the traffic.

The original Kawaguchi office, Osaka, situated near the mouth of the Ajikawa, not being sufficiently spacious or convenient to accommodate the gradually increasing traffic, a new position was selected at Hondamachi, and a new building erected. This work was commenced on the 13th May and completed on the 23rd October 1876.

The total length of lines constructed during the fiscal year now under notice is about 460 1/2 English miles, and the mileage of wire 773 1/4 miles. The number of stations opened is 38, with four others temporarily open on the Battle field, (under the charge of the Kobusho.) In addition to these there were the lines erected for the Army telegraphs, viz: 206 miles, with 28 offices thereon. The war still continuing at the date of this report, the mileage of line and the number of stations will probably be increased still farther as occasion may require.

In the month of October 1876 riots occurred at Kumamoto and

假局 大阪川口電信局ハ安治
ヲ設ケテ 狹隘ナリシカ通信日
ト其數ヲ増スニ及ラステ
殊ニ其不便甚カラス
因テ地ヲ本町ニ易ヘ
其結構ヲ大ニシテ之ヲ
新築スルニ五月十三日
開始シテ十月二十三日
成此ニ徙ル

此一年中新ニ電線ヲ架スル者總計一
百八十四里八町餘ヲ延張スレハ三百
九里十一町餘局ヲ開ク三十八所戰地臨
時ニ開ク者工部直管ノ局四所軍團ニ架
スル所ノ線路八十二里十三町局ヲ設ク
ルニ二十八所即今征討中ニ在リ戰線電線
ト共ニ進ムヲ以テ其里程局數ノ增長ス
ル者又當ニ許多アルヘキナリ

賊徒ノ

Yamaguchi, during which time the transmission of private messages was prohibited south of Okayama, but the restriction was removed immediately after their suppression. In February of the current year on the rebellion breaking out at Kagoshima, the transmission of Japanese messages was stopped throughout the Empire, but upon those forwarded and received by Foreigners, (with the exception of cypher messages,) no restriction was placed.

TARIFFS.

In the month of August 1876 a supplement to the tariff of charges of March 1875 was issued as follows:

For Japanese messages between Yonesawa and Fukushima or Yamagata, 7 Sen.

For Japanese messages from Tokei or any other station to Yonesawa, 2 Sen to be added to the rate for Fukushima and 4 Sen to that for Yamagata.

For Foreign messages between Yonesawa and Fukushima or Yamagata 25 Sen, and for those

外 報 鹿 ン 報 亂
國 報 兒 ン 報 報 報
人 ノ 島 乃 通 通 起
ノ 通 賊 十 信 信 二
私 信 徒 十 十 停 因
報 ハ 停 亂 復 亂 岡
依 過 二 本 平 山
然 ス 因 年 平 以
之 然 本 年 平 西
ヲ 然 年 年 平 西
通 此 國 月 及 私

則 稅 信 電

シ 布 八 明
達 年 治
ニ 三 九
係 月 年
ル ノ 八
ニ 月 東
追 京
加 以
ス 北
ル 電
一 信 表
ノ 中
如 中

from Yamagata to Fukushima 50 Sen.

For Foreign messages from any station south of Fukushima to Yonesawa, the same rate as to Sendai, and those to Yamagata the same as to Ichinoseki; from any station north of Fukushima to Yonesawa the same rate as to Shirakawa, and for messages to Yamagata the same rate as to Utsunomiya.

In the month of November 1876 another supplement to the tariff was published as follows:

For Japanese messages between Yokkaichi, and Nagoya or Tsu, 7 Sen.

For Japanese messages from Tokei or any other station to Yokkaichi, 2 Sen to be added to the Nagoya rate, and to Tsu, 4 Sen in addition to the Nagoya rate.

For Foreign messages between Yokkaichi and Nagoya or Tsu, 25 Sen, and those from Tsu to Nagoya, 50 Sen. For Foreign messages from any station north of Nagoya to Yokkaichi the same rate as to Gifu, and those to Tsu

米澤ヨリ隣接福島及山形へ歐
文一音信税金貳拾五錢山形ヨ
リ福島へハ金五拾錢
福島以南東京ヨリ米澤へノ同
一音信税ハ仙臺ト同シ山形へ
ハ一ノ關ト同シ福島以北ヨリ
米澤へハ白川ト同シ山形へハ
宇都ノ宮ト同シ

同年十一月東京以西電信表中
加スルノ左ノ如シ
四日市局ヨリ隣接名古屋及津
税金七錢
東京其他各局ヨリ四日市へノ
名古屋ノ税ニ金貳錢ヲ加へ津
加課ス
四日市ヨリ隣接名古屋及津へハ
金貳拾五錢津ヨリ名古屋へハ
金五拾錢名古屋

the same rate as to Hikone; From any station south of Nagoya to Yokkaichi the same rate as to Toyohashi, and to Tsu the same rate as to Hamamatsu.

EDUCATION OF NATIVE OPERATORS.

In the year 1874 when a notification was issued that the Government was willing to engage 250 more students, only 159 pupils were obtained and 50 more by the month of September 1876, which produced a total of 209. As however 48 were not found competent to undertake the duties required of them, they were dismissed, thus the numbers fell short of the total required to the extent of 89. Consequently, in March 1877, as the services of operators were much needed for our ordinary stations and for Military Offices in Kiushiu, not only for service in the field telegraph, but generally in connection with the gradually extending lines of our own Department, another notification was issued for the engagement

屋以東京ヨ
リ四日市へノ
同一音信税ハ
岐阜ト同シ津
へハ彦根ト同
シ名古屋以西
ヨリ四日市へ
ハ豊橋ト同シ
津へハ濱松ト
同シ

育教術技

技術生徒ノ増員ハ曩ニ明治七年中
二百五拾名招
募ノ令ヲ出シ而シ現ニ入校セシム
ル者百五十九
名ナリ九年九月ニ至リ又々五拾名
ヲ募入シ合セ
テ貳百九名ニ及フ然ルニ成業ノ
目途ナキヲ以テ
退校セシムル者四拾八名因テ尙
ホ八十九名ノ
員アリ此時ニ當テ逐次新線ノ開
設其數ヲ増殖ス
ルノミナラス本年二月ニ及テ
鹿兒島遊徒征討
ノ事起リシヨリ九州地方ノ各
分局及軍團ニ用
ル所ノ戦地ノ電線日ニ其數ヲ加
ヘ技員ヲ要スル

of 50 students, and there were so many applicants that as many as 107, out of the total number of candidates who submitted themselves to examination, were selected and entered upon their studies at the School.

MECHANICIANS' BRANCH.

During the fiscal year now under report, 20 Morse sounders and a quantity of other instruments such as Lightning dischargers, Magnets & ca. were made at the Mechanicians' shop of our Depôt at Shiodome, and proved upon tests being applied to have been efficiently constructed. The native mechanicians have already had several years' practice, since the depôt was established, and it is not unreasonable to expect that they will go on improving until ultimately all the apparatus of every kind required by us may be manufactured in Japan, at a great saving as compared with the expense of obtaining such from abroad. With this object the staff in this branch will be augmented,

入百多ヒ相ノ拾以
校七キ試踵令名テ最
セ名ヲ驗テ入ヲ發ヲ三
シヲ以及入校ヲス募月
ム撰テ第ノ校ヲ生入更
ンテ競ノ者乞徒ルニ
テニ者者乞徒ルニ

造製械機

潮留麻舎中ニ置ク所ノ製機處ニ於テ聽
響機二十基及ヒ避雷針電鏽其佗數種ノ
器械ヲ製造ス皆其精巧極メテ熟ル
ノ設ケ既ニ數歲ヲ歴テ工術隨テ熟ル
ト雖ハ嗣後益マシ業ヲ大ニシテ機器
諸物品ヲ製出セシメテ其大ニシテ機器
仰ク浪費ヲ省カント欲ス現ニ工手ヲ

and it is hoped that a high degree of proficiency will shortly be attained.

EXPENDITURE.

The amount allotted for Telegraphs for the fiscal year from the 1st July 1876 to the 30th June 1877, was Yens 633,413. 84., out of this sum Yens 519,453. 90 and Mex: Dollars 59,590. 49 were expended under the following heads.

1. Ordinary expenses, (Salaries of native and foreign staff, travelling expenses, petty repairs, cost of material, maintenance of lines, general expenses at Stations &c.) Yens 464,154. 90. and \$ 16,591. 46.

2. Special expenses, (passage money of some of the foreign staff, expenses for the erection of new offices and school, and repairs of a more extensive nature.) Yens 10,831. 43.

3. Incidental expenses, (extension of lines &c.) Yens 44,467. 57. and \$ 43,099. 03.

The amounts of Yens 37,630. 63 and \$5,332. 50, were paid out in ad-

セチ巨製テ増
シ鍛其造之員
ム煉術シヲ

額金費經

明治九年七月一日以
降同十年六月三十日
ニ至ル一年度ノ經費
目途金總計六拾三萬
三千四百拾三圓八拾
四錢三厘ナリ而シテ
ニ支用スル所ノ三費
合計金五拾壹萬九千
四百五拾三圓九拾錢
洋銀五萬九千六百九
拾弗四拾九泉ニシテ
其内譯左ノ如シ
定額常費金四拾
六萬四千五百拾
四圓九拾錢四厘
洋銀壹萬六千五
百九拾壹弗四拾
六泉
額外常費金壹萬
八百三拾壹圓四
拾三錢
是ハ外國人歸
國旅費各局並
學校新築費大
營繕費等ヲ云
臨時費金
四萬四千
四百六拾
七圓五拾
六錢六厘
洋銀四萬
三千九拾
九弗三泉
是ハ新
線建築
費等ヲ
別額
金三
萬七
千六
百三
拾圓
六拾
五錢
五厘

total of Yens 2,905,656 as the expenditure on account of telegraphs from the commencement of the works to the 30th June 1877.

TRAFFIC AND RECEIPTS.

During the fiscal year now under report there were transmitted 642,266 Japanese messages (of which 43,785 were service messages,) and 38,273 Foreign messages (of which 5,329 were service messages,) and the receipts amounted to Yens 231,355. 54, leaving the sum of Yens 402,433. 27 deficient on the amount of actual expenditure as shown under that head.

Comparing the number of messages and amount of receipts with those of the previous year, there is an increase of 69,073 messages and of Yens 65,684.

The addition of the sum of Yens 231,355. 53. to the sum of Yens 414,970. 53 as shewn in my last report shews the grand total of Yens 646,326. 06 as the receipts on ac-

百八拾八圓
餘ヲ加算ス
レハ則チ創
業以還十年
六月三十日
ニ至ルマテ
通計金貳百
九拾萬五千
六百五拾六
圓餘ナリ

金稅収及數信音

明治九年七月一日ヨリ同十年六月三十日ニ至ル一周年間ニ寄送セシ音信數和文ハ六拾四萬二千六百六拾六通内ハ四萬三千七百六拾六通ハ局報歐文ハ三萬八千貳百七拾三通内五百貳拾九此稅總計金貳拾三萬千三百五拾五圓五拾三錢九厘ナリ是ヲ前記現費額ト決算額トナ合算セシ全額ニ比較スレハ其收稅金四拾萬二千四百三拾三圓貳拾六錢五厘ノ不足アリ

右一周年間ノ第二報告書ニ音信數及收稅金ヲ前年度間ニ比較スレハ音信數ノ増殖ハ六萬九千七百七拾三圓五拾三錢ニ前記金貳拾三萬三千三百五拾五圓五拾三錢餘ヲ加算ス

vance on account of purchases of materials &c. last year, and are now finally brought into account and settled.

A further sum of Yens 11,681. 25 was paid on account of expenses incurred at the St. Petersburg convention in 1875. (in addition to Yens 6,488 paid out in the previous year and which was included in the above mentioned sum of Yens 37,630. 65.)

A further amount has been paid in advance on account of material and instruments, and on account of extension lines, and will be detailed in a future report, when the accounts have been finally closed.

The total amount of the foregoing expenditure amounts to Yens 633,788. 80. (of which Yens 579,144. 39. were actual disbursements and 54,644. 41. were paid on account,) including Dollars at the rate of one Yen per Dollar. This on comparison with the expenditure of the preceding fiscal year shows an excess of Yens 123,560. 67.

The addition of Yens 633,788 to the sum of Yens 2,271,868 as shown in my last report, gives the grand

洋銀五千三百三拾貳弗五拾泉
是ハ外國ヨリ購入諸機械代共外
前年假ニ支出セシ者決算額
金壹萬千六百八拾壹圓廿五錢九厘
外金六千四百八拾八圓 但前項三
百三拾圓六拾五錢五厘ノ
内ヲ以テ此費用ニ入ル
是ハ魯國電信會議ノ節出張諸費用
ナリ

此外器械代價或
ハ新線路建築費
トシテ假ニ支發
セシ金額若干ア
リト雖モ其額數
ハ決算ノ時ニ當
テ之ヲ載スヘシ
前記現費額金五拾七萬九千四百四圓
三拾九錢 洋銀ハ壹萬壹千壹圓ト別額決算
金五萬四千六百四拾四圓四拾壹錢四厘
トナ合算ノ金六拾三萬三千七百八拾八
圓八拾錢四厘ナリ之ヲ八年七月一日ヨ
リ九年六月三十日ニ至ル一周年間ノ現費
及決算額ヲ合算セシモノニ比較スレハ
其增加金拾貳萬三千五百六拾圓六拾七
錢四厘ナリ又第二報告ニ登記セシ連年
費用金ノ總計貳百貳拾七萬壹千八百六
拾八圓ニ本年度ノ費額六拾三萬三千七

count of Telegraphs from the time of the first opening to the end of the present fiscal year.

The addition of the 680,939 messages transmitted during the fiscal year now under notice, to the figures mentioned in my last report, viz: 1,461,346, makes the total number 2,142,285 messages transmitted.

OFFICERS AND EMPLOYÉS.

The total number of Officers, Engineers and Employés in the Telegraph service, including the Students and the Foreign Staff at the date of this report is 1,147, which on comparison with the number for the last fiscal year, shews an increase of 100 persons.

Owing to the establishment of the Denshin-Kioku (Telegraph Bureau) in the place of the Denshin-Rio (Telegraph Department), causing a considerable change in the rank and classification of the staff in the month of January 1877, and the appointments of officers during the follow-

レハ通 又連年ノ音信數總
計金六 計壹百四拾六萬千
拾四萬 三百四拾六通ニ此
六千三 一年間ノ總計六拾
百貳拾 八萬九百三拾九通
六圓六 ヲ加算スレハ通計
錢餘ナ 貳百拾四萬貳千貳
百八拾五通ナリ

員人屬附及吏官

本局及ヒ各分局建築等ノ官吏技手在
校修技生並附屬ノ者本年六月三十日
ノ現員中外人ヲ合セテ一千四百七十
名ナリ之ヲ前年度ニ比較スレハ一百
名ノ増員アリ然レ本年一月寮ヲ廢
シ局ヲ置カレ官員等級改正ニヨリ官
吏ハ更ニ新官ニ任シ殊ニ進退黜陟ス
ル者擲ナカラス又其後ニ至テ新任ス

ing months, the number can not be regularly, compared as in ordinary cases. The new ranks and classes of the various officers are shewn in the accompanying table.

A. K. Yoshikawa.
Director of Telegraphs.

Kobusho, Tokai.
30th June 1877.

電信局長芳川顯正

明治十年六月三十日

ル者アリ故ニ此増員アリト
雖モ平常ノ例ヲ以テ見ルヘ
カラス其人員ノ區分ハ則チ
別表ノ如シ

表 員 現		事 務	
二	任 奏	二	任 奏
八四	任 判	八四	任 判
四四	外 等	四四	外 等
三	人 國 外	三	人 國 外
六一	属 附	六一	属 附
三一	計 合	三一	計 合
術 技 他 其 築 建		術 技 信 通	
七六	任 判	二四一	任 判
六一	外 等	六〇二	外 等
五一	人 國 外	〇一	人 國 外
四	生 技 修	五九一	生 技 修
一〇二	人 守 看 兼 夫 工	八七一	使 驅
三〇三	計 合	一三七	計 合
七四一		計 通	

ADMINISTRATION.

Japanese officers (Sonin rank).....	2
— Do — (Hannin rank).....	48
— Do — (Togai rank).....	44
European officers	3
Other employes	16
	<u>113</u>

COMMERCIAL STAFF.	ENGINEERING STAFF.
Japanese officers (Hannin) .. 142	Japanese officers (Hannin) .. 67
— Do — (Togai) .. 206	— Do — (Togai) .. 16
European officers	European officers
Students	Students
Messengers	Linemen and Workmen
	<u>201</u>
	<u>303</u>
	<u>731</u>
Total	<u>1147.</u>

