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PARLIAMENT OF TASMANIA.

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**LANDS AND WORKS DEPARTMENT,—CROWN  
LANDS BRANCH:**

**REPORT BY THE DEPUTY SURVEYOR-GENERAL.**

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Presented to both Houses of Parliament by His Excellency's Command.



LANDS AND WORKS DEPARTMENT, TASMANIA.—CROWN LANDS  
BRANCH.

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*REPORT by the Deputy Surveyor-General.*

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*Crown Lands Office, Hobart, 3rd July, 1884.*

SIR,

I HAVE the honor to submit to you a Report upon the working of the Crown Lands Office since I assumed charge of it, on the 1st January, 1883. This Report will afford the means of judging whether, since the Lands and Mines Branches were separated, the Public Service has gained in efficiency, and whether the extra cost of working the Department is compensated for by the extra amount of useful work performed.

*Necessity for the separation of the two Branches.*

The necessity for the separation of the two Branches becomes all the more apparent now that each office has been able to review past work and prepare for future operations. It is clear that the unexpected pressure of work in connection with the rise of the mining industry has had the effect of preventing proper attention being given to the work of the Lands Branch; and it is equally clear that the work of the Mines Branch has been complicated by the inexperience of those officers who had charge of its details.

In this office it is interesting to notice how, by degrees, the Survey Branch has gradually receded from its professional status, and how the control of its important functions has gradually passed into unprofessional hands,—an experiment which has certainly not been a success.

As soon as the separation of the two Branches was effected and order restored, I made it my business to examine into the whole system of office work, with a view of at once clearing off any arrears that might exist, and at the same time ascertain what improvements might be effected. As each defect was made clear I laid the matter before you, and received your instructions as to how the remedy should be applied; and thus, by degrees, changes were introduced, and everything put in a fair way of progress.

*Arrears.*

The amount of arrears was very large; and our duties were complicated by the fact that, since 1872, no attempt has been made to register the transactions and papers,—thus rendering it a most difficult matter to ascertain what had been done in the past. To wipe off this formidable mass of arrears a special Clerk was put to work, and has continued his efforts up to the present time. All the correspondence is now registered up to date, and all the papers put away in the presses. There still remains a quantity of dusty papers, chiefly applications: these I propose to sort out as opportunity offers.

Another heavy piece of work was to clear off the arrears of Contracts to purchase under the 24th Section of "The Waste Lands Act." Some 4000 of these, in duplicate, were issued.

The matter demanding most urgent attention was the state of the Land Revenue. A great number of selectors were in arrears with their payments, and a great many lessees were not paying their rents. Lists of defaulters were at once prepared, and notices sent out that the amounts must be paid at once, or the land would be put up for auction. By this means the greater part of the money was recovered; and the action taken has had the effect of securing more prompt attention to the demands of the Treasury on purchasers and tenants. Very few lots were ultimately sold for default; and the greatest care was taken that all cases of distress were submitted to the favourable consideration of the Governor in Council. A second Default Sale was held in the early part of the present year. Many people seem to make it a practice to put off payment to the last possible day, and it must be confessed that "The Waste Lands Act" rather lends itself to this proceeding. I trust that in the new Crown Lands Bill this defect will be remedied.

With regard to the rents of Pastoral Lands I find it is extremely difficult to deal with them; here again the provisions of the Act are defective, and the lax practice of this office has made the evasion of payment an easy matter. Although much remains to be done before the country will get the full benefit of its Pastoral Rents, I can fairly claim that a great advance has been made in the practice of dealing with these lands, and with improved Legislation better results will follow.

Much useful work has been done in preparing proper Indexes to Books, and in preparing better Forms for Applications, Transfers, Timber Licences, and many other things.

By your directions a private room has been set apart for my own office, so that gentlemen having business with the office can see me without being interrupted. The other rooms have all been renovated, papers put away, and better appliances provided for carrying on the daily work. Although the disposal of all these arrears has pressed heavily upon our small clerical staff, it is a satisfaction to know that it is now all done with, and we are in a position to cope with our daily work without fear of our again falling behindhand.

#### *Accounts.*

Previous to my appointment the whole system of accounts had been overhauled, and the future system laid down by the officers of the Audit Department. Formerly the head of this Department also acted as Accountant, a practice both inconvenient and objectionable; now an officer has been appointed who acts as Accountant to the Lands and Mines Branches. All moneys received by post pass through my hands, and are entered in my diary before they go to the Accountant; a careful check is kept over the books, and occasionally they are examined by the officers of the Audit Department.

In connection with accounts I have several times brought under your notice the unsatisfactory arrangements for collecting the Land Revenue. At present the Treasury collects the Instalments and Rents, and this office collects the Survey Fees, Timber Licences, and small fees. This dual control entails much extra work, and a constant reference from one Department to the other; and it is not always possible to prevent confusion. I think it would be a far better plan to attach an Officer to this Department to collect and look after the Land Revenue. I understand that this proposal meets with your approval, but that at present the Treasury officials are not prepared to adopt it.

#### *Daily Work.*

The daily work is increasing very fast, and keeps our staff fully employed to keep pace with it. The number of letters dispatched last year exceeded 20,000. Every effort is made to answer letters speedily, and as the press of arrears is now cleared away, I hope to see an improvement in this respect. Should the work continue to increase at its present rate it will be necessary to appoint a Registration Clerk to keep record of papers and see that letters are answered.

#### *Launceston Branch.*

In accordance with your instructions I now pay a monthly visit to the Branch Office in Launceston, and, judging from the number of people who avail themselves of the opportunity of seeing me, I have reason to believe the arrangement is highly appreciated by the public.

The Clerk in Launceston has been supplied with a number of new plans of the Northern Counties, and others are in course of preparation for his use. It is contemplated to prepare a set of plans of all the Northern Towns for Photo-Lithography, for the use of the Launceston Office; several of them are already prepared, and others are in hand. A new plan of Launceston will be amongst the number.

#### *Lithographic Work.*

Early in January, 1883, a complete Litho-Press and Gas Engine were erected in the basement of this Office, and by the help of this fine machinery we have been able to turn out a large number of maps and plans in a very superior style. The large map of Tasmania, two smaller maps of

Tasmania, geological maps, and various plans to illustrate Parliamentary Papers, have been turned out during the year, besides a large quantity of county plans, sale plans, and circulars. All the plans for the Government Railways under construction have been printed during the year, and we are now engaged on the engineering drawings for the Derwent Valley Line. Altogether I think our Lithographic work will compare favourably with that produced in any of the other Colonies.

#### *Photo-Lithography.*

It has been decided to establish a Photo Gallery in connection with this Department, and the necessary building is now in course of erection.

The advantages to be derived from this arrangement will be considerable; it will enable us to put a stop to the ruinous destruction of original plans, which now entails so much extra work upon the office; it will enable us to keep our county plans entered up, and to supply the public with the latest information as to settlement and selection.

It is intended to compile parish plans of all the localities where settlement is progressing; and as these plans will contain all the information to be found on the surveyor's diagrams, their value to the public will be very great. The system will save very much labour to the Public Works Department, and will enable us to supply working plans of public works to whoever may require them.

#### *Drafting Room.*

For many years the staff in the drafting-room has been far too weak to carry on the important duties falling to its share. When it is remembered that the draftsmen represented the last remaining traces of the Survey Office of former days, it might have been expected that no consideration for economy would have prevailed against efficiency; but, unfortunately, and mainly owing to want of a professional element in the Office, the drafting staff has for the last ten years been insufficient both in numbers and ability. Soon after my appointment the Chief Draftsman drew my attention to the state of his room, and represented the futility of endeavouring to carry on any longer under existing circumstances. At that time there were only two first-class draftsmen in the Office—the Chief Draftsman himself and Mr. Hall. On the shoulders of these two officers rested the whole burden of the professional work of the Office. It was obvious that these two officers were working at a strain impossible to be sustained; both of them were working long after office hours, and still the work was accumulating, and it was useless to attempt to introduce any improvement unless the staff was reorganised.

On laying these matters before you, I was authorised to obtain another first-class draftsman, and was fortunate to secure Mr. Ellis, a gentleman who received his early training in this Office, and has since acquired experience both of office and field work in Victoria and South Australia. This was a decided advance: Mr. Ellis assuming charge of the applications under the 24th Section, enabled us to deal with these matters promptly, an improvement which must have come as a relief to the public.

#### *Map of Tasmania.*

Mr. Hall being relieved of a part of his former duties, was deputed to attend to the preparation of the new map of Tasmania, a work initiated by yourself during your former term of office, but which had been delayed year after year. It is needless to say that Mr. Hall did his share of the work in his usual painstaking manner, and turned out a map extremely creditable to his skill as a draftsman. Mr. Hall also prepared a smaller map to accompany the Crown Lands Guide. This also is a fine specimen of drawing, and is certainly superior to any map I have seen produced in Australia. These two are the first authentic maps produced since 1859, and are the first of their kind produced entirely in the Colony.

#### *Computing Draftsman.*

Towards the end of last year a vacancy occurring on the staff, Mr. Butcher was engaged as temporary draftsman, and as he proved to be a first-class officer, his services were secured as computing draftsman, and the duty assigned to him of examining and checking surveyors' plans,—a business very much neglected for many years. Subsequently Mr. J. M. Clarke joined the staff, and, as he is a good mathematician, he was able to assist in the work undertaken by Mr. Butcher.

#### *Restoration of the Survey Branch.*

Thus, whilst in the beginning of 1883 we had but two superior draftsmen, there are now five; the work formerly left undone is now well done, and we have the satisfaction of knowing that an end has been put to the accumulation of troubles and delays arising out of faulty examination of surveys. Moreover, the Office has once more assumed its professional status: besides myself, there are in the Office two authorised surveyors and two draftsmen possessing field experience, and two experienced surveyors are in the field as Inspectors.

There is now a fair division of labour amongst the Draftsmen, and the Chief Draftsman, instead of being overwhelmed with a multitude of minor duties, is in a position to exercise a proper supervision over his officers.

#### *Increased Cost.*

Despite the fact that the work of the office is increasing every year, and that the efficiency of the staff has been secured, the cost in salaries does not exceed that of the year 1861 and the following period. In 1861 the clerical staff cost £740, in 1870 it cost £890; at present it costs £815, including temporary assistance. In 1861 the drafting staff cost £1800, in 1870 it cost £910; at present it costs £1825.

#### *Custody of Plans.*

The proper custody of plans is a subject of extreme importance, and it fortunately happened that the matter engaged your attention soon after your assumption of office, leading to extensive alterations being made in the plans for the new wing in Salamanca Place so as to provide a fire-proof room in which to keep the valuable collection of plans now in this office. At present these plans are wholly unsecured.

#### *Survey.*

During the last few years the subject of survey has been prominently brought forward, and there is a general consensus of opinion that our system is behind the times, and inaccurate.

In order to fortify yourself with the opinion of a Surveyor of unbiassed judgment and high professional standing, you obtained the services of Alexander Black, Esq., Assistant Surveyor-General of Victoria, who made a thorough examination of our system, and furnished you with a most exhaustive and practical report.

Summed up briefly, Mr. Black's recommendations are,—Professional control, Field Inspection, Mathematical Check of Surveys, True Meridian, Parish Plans, Photo-Lithography, and a revision of the Trigonometrical Survey.

Following on the lines laid down by Mr. Black, the first step taken towards improvement was to define the qualifications of Surveyors, and to establish a test examination for candidates desirous of being admitted into the service. A Board of Examiners having been appointed, a scheme was drawn up similar to that in force in Victoria. The first examination will be held in October next, and I believe some half a dozen candidates will present themselves. The institution of this test examination put a stop to the loose manner in which authority to make surveys was conferred,—a fault which not only has involved ourselves in much trouble, but has tended to bring our Surveyors into contempt with the Survey Department of the other Colonies.

The next step was to place on the Estimates for 1884 sums to defray the expense of Field Inspection, Examining Draftsman, and Photo-Lithographer. Parliament having sanctioned this expenditure, no time was lost in calling for applications to fill the posts. Mr. Hardy, from South Australia, was appointed Inspector, Mr. Stokell, from Victoria, was appointed Assistant-Surveyor, and Mr. Butcher was appointed Examining Draftsman. The appointments dated from the 1st February, and by the beginning of March all the preliminary arrangements were completed and the officers at work.

As both Mr. Hardy and Mr. Stokell have been accustomed to surveying in comparatively open country, I thought it expedient that, before entering upon purely inspection work, they should have practical experience of surveying in rough heavily timbered country. Mr. Hardy commenced a check survey of Mr. Sorell's work at Frankford, whilst Mr. Stokell made an examination of some of Mr. Chalmers' work at the Mersey and Dasher Rivers. The result of these inspections was to show very plainly the necessity of having the whole practice of field-work laid down by regulations. It is true that a number of regulations have been issued from time to time; but, except to a few of the oldest Surveyors, their very existence is unknown. I have therefore disinterred these regulations, and, with the assistance of the Inspector of Surveys, revised and extended them, and they are now about to be issued. The regulations will deal with the whole practice of the Survey Office; from them the Surveyors will learn what is expected at their hands, and the Inspector will see that the work is executed in the manner prescribed. At present there is no uniformity whatever; each Surveyor follows his own ideas, and the result is extremely bewildering to the office draftsmen, whose time is taken up with vexatious references to Surveyors for explanations of discrepancies and omissions.

It would not be fair to find fault with Surveyor's work so long as the Department has no standard of excellence, and it is useless to look for agreement of measure so long as each Surveyor is free to adopt his own standard of length, and to base his lines on whatever magnetic bearing his instrument gives him.

In order to gain uniformity of measure I am preparing to lay down standard chains in various parts of the Colony. Surveyors will be required to keep steel bands for standard purposes only, and the Inspector will see that they are correctly adjusted to the standards laid down. At present I would venture to say that if all the chains now in use in the bush were gathered in and compared we should not find half a dozen the correct length.

*System to be adopted.*

As to the system of Survey to be adopted for the future, I must confess that the subject is one surrounded with difficulties, and unless our Land Laws are modified all attempts to initiate a scientific system will fail. It will be a difficult matter to secure a high standard of excellence under any system; but when it is considered that selection before survey is the law, all practical surveyors will agree that the difficulties are enormously increased. In all great colonising countries these difficulties have proved so great that the principle of selection before survey has been practically discarded. Lands are surveyed and roads laid out in advance of selection, and if ever the progress of settlement gets ahead of survey the result is exactly the same as follows in this colony,—accuracy is sacrificed to speed; settlers must be accommodated; delay means loss to the Colony as well as to individuals. Had the Trigonometrical Survey been carried on instead of being abandoned just as it was put into shape,—if only one small party had been employed for the summer months of each year,—the whole Island would now have been mapped out and standard lines established in all directions, thereby affording reliable checks to our surveys, and at the same time providing topographical details which would have proved of immense value to selectors, prospectors, and others. It seems a most extraordinary policy that after spending so much money on the Trigonometrical Survey,—after establishing some hundreds of fixed points and building objects,—at the very point where the survey was likely to become useful it was abandoned, because it was feared that the sides of the triangles might possibly be some few feet erroneous, owing to the irregular shape of the objects erected, and this, too, although it was admitted that the chain surveys were in some instances out of position to the extent of two miles. It is beyond our means to restore the work to its original state and rebuild the couple of hundred objects originally established, and yet unless something of the kind is done we cannot expect to have a scientific system of survey. Our Land Revenue is small,—it has now reached £70,000 a year, and probably will not increase,—and therefore we cannot afford much extra cost of survey, especially whilst the whole country is crying out for roads and bridges. It is incumbent on us to devise some system to suit our peculiar circumstances.

In the new Crown Lands Bill there is a proposal to constitute agricultural areas. These areas will be surveyed before selection. Selection before survey will not be done away with, but the evils will be modified considerably.

After much consultation with the Inspector of Surveys, it has been decided to adopt a system very similar to that in use in New Zealand. Wherever agricultural selection is likely to be active, suitable stations will be selected and standard lines laid down on the true meridian, as determined by astronomical observations. These lines will be laid down by the Assistant-Surveyor, and will be used as parish boundaries, all surveys in the vicinity being referred to them. The trigonometrical stations in the vicinity will be rebuilt and subsidiary stations instituted, so as to break down the large triangles and bring their measurements to bear upon the new work. It is proposed to start from the stations surrounding the base of verification at Longford, and from it extend a series of triangles over the north east and north west, and compare the results with those of the original trigonometrical survey; other bases will be measured on the East Coast and on the West Coast,—not with the scientific exactness essential for geodetic calculations, but sufficiently accurate to be of service for practical purposes.

As these operations will form part of surveys for settlement purposes, they will not be expensive; if the results obtained agree approximately with the trigonometrical survey, all doubts as to the accuracy of the latter work may be set aside, and the differences set down to our less refined operations.

Mr. Hardy has already erected a new station near Frankford and another on Mount Hicks; at the latter point laying down a true meridian, from which a number of surveys in that locality will be laid off.

The new Land Bill also provides for survey of roads in advance of settlement, and if this principle is established it will materially assist in securing a better system of survey, the sub-division of land being made subordinate to road requirements. At present the Department is continually pestered with demands for new roads, and for alteration in surveyed roads, to such an extent that it is apparent the present system of laying out roads is a failure. In justice to the surveyors, it should be remarked that they themselves have frequently represented the impossibility of securing good roads under the present system of defining them; and although the Engineer-in-Chief has endeavoured to arrange for a change, I find from the correspondence that this Branch has resisted the introduction of the system we are now endeavouring to establish. I consider

that if an harmonious arrangement can be come to with the Public Works Branch, and if the Inspectors of Surveys put a stop to the prevalent practice of reserving roads at random, the saving to the revenue will far outweigh the whole cost of Inspection.

By surveying roads in advance of settlement, and by insisting that our surveyors shall mark their lines well, faithfully delineating upon their plans true measurements as marked on the ground, with the help of field inspection and a rigorous office examination of plans, I trust that those inaccuracies, inseparable from the system of selection before survey, will be reduced to a minimum.

With the object of securing uniformity in all Government Surveys the proposed Regulations have been submitted to the Engineer-in-Chief, Secretary of Mines, and Recorder of Titles, and it has been agreed that these Regulations shall be adopted in each office.

#### *Discrepancies in Grant Deeds.*

One other matter in connection with survey requires to be provided for, and that is some method of adjusting discrepancies in Grant Deeds. All colonies have laid down the principle that ground marks give possession as against written descriptions. This principle should be defined and made law, and a means provided of bringing the written descriptions into accordance with the marks on the ground, or, in other words, with the property the holder was put in possession of when the Crown marked off his land. This matter has been so ably discussed by the late Surveyor-General of New Zealand, and so concisely put by Mr. Black, that the arguments need not be repeated here. In the Crown Lands Bill will be found a clause designed to introduce into Tasmania the principle already adopted in all other Colonies.

#### *Special Work.*

During the past eighteen months several important pieces of work have been carried out of a nature outside our routine. Of these the Crown Lands Bill, 1883, the Land Regulations, and the Crown Lands Guide are the most important.

The Crown Lands Guide has evidently supplied a long-felt want, for the whole edition of 1000 copies has been taken up within three months of its issue, with the exception of a few copies retained for special purposes. Materials for a second edition are now being collected.

The Land Regulations were issued in order to remove certain difficulties experienced in working the Land Laws, and in order to prescribe more fully the conditions of Timber Licences and other licences.

#### *Crown Lands Bill, 1883.*

The Crown Lands Bill of 1883 was a measure that entailed an immense amount of labour to prepare. It aimed not only to carry out certain proposals sketched by yourself, with a view of securing a class of yeoman settlers, and holding out liberal inducements to selectors, but also at removing various faults of details in existing Acts, and supplying many omissions.

The great difficulty intending selectors experience is to find land suitable for settlement. New arrivals waste their time and money in looking for spots on which to make a home; they become disheartened, seeing the difficulties of bush life, and leave the colony. During last year several gentlemen come over from South Australia looking for land, and stated they were the representatives of numerous families who were anxious to exchange from a region where drought prevails to a climate more suited to Europeans. After seeing plenty of forest land of good quality, these gentlemen decided that they could not settle themselves, or advise their friends to come, as they could not afford to wait for roads to be constructed.

To meet cases of this kind you sketched out the principle of Agricultural Areas as amplified in the new Bill, providing for suitable area being set apart for settlement by *bonâ fide* yeoman farmers, roads having previously been set out and cleared.

Perhaps the most difficult and unpleasant duty this office has to discharge is to deal justly with Pastoral Lands, and during the past year these difficulties have been unusually pressing. The Minister finds himself constantly called upon to guard, on the one hand, against impeding a *bonâ fide* settler, and, on the other hand, against lending himself to spoliation of the Crown tenants. When the Waste Lands Act, 1870, was framed, it was contemplated to classify the lands of the Colony, discriminating between Agricultural and Pastoral Lands. The intention was good, but, unfortunately, it was never carried out. Those who framed the Act intended that selection and settlement should be synonymous terms—that speculators should be compelled to purchase at auction; but this intention has been frustrated by the provision allowing a credit selection to be paid for in cash, and a grant obtained without residence or improvement. Seeing how limited is the area of

land fit for agricultural purposes still remaining to the Crown, it would be good policy not to alienate any acre unless to *bonâ fide* settlers.

In this Island there are many thousands of acres of poor lands barely fit for pastoral purposes. Dotted amongst these tracts are small areas of bottom lands fit for cultivation, and it is to the interests of the Crown to prevent these lands from becoming unsaleable or unremunerative; most of it is leased as pastoral runs. As our Land Law allows any one to select out of leased lands, there is a constant desire to pick the eyes out of the country—to select the best lands, and render the remainder useless to anyone. Thus it not unfrequently happens that large runs which for years have been let for fair rentals are given up, because small areas of the best portions have been selected by people who have no intention of cultivating the land in a *bonâ fide* manner.

Take the following as a typical case. A rents 500 acres and pays £5 a year for it; he fences in and improves a small piece, and puts up a shepherd's hut; B applies for this piece, say 25 acres, and gets it; A thereupon throws up the rest of the land, claims compensation for the permanent improvement, which the Crown is compelled to pay to him, but cannot charge to B, who therefore gets 25 acres, hut, fences, and cultivation for an average of about fifty shillings a year for fourteen years.

If settlement followed these selections the evil, though great, might be put up with; but it is palpable that settlement does not result, and that advantage is taken of the Act to carry on a system of legalised dummyism.

Within the last month or so a gentleman from England applied for 320 acres in a remote situation, and wished to rent 2000 acres of grazing land in the vicinity. He proposed to bring out friends from England to join him in settling the locality. But this Department not being able to guarantee him undisturbed possession during the term of the lease, he declined to have anything to do with it, and left the Colony.

If we expect to get settlement on the extensive marshes and heathy plains existing over the Lake Country, the West Coast, and, to a smaller extent, in the North-Eastern Country, we must be in a position to offer a secure tenure to those who may desire to lease these lands and improve them; and it was with this object in view that the provisions relating to pastoral areas were inserted in the Crown Lands Bill. I am aware that these provisions have evoked much unfavourable criticism, but, as a rule, it has emanated from those who have mistaken the nature of the proposition itself, and the causes which lead to its proposal.

There are various other matters in our existing Land Laws which require amendment, and in the new Bill clauses have been introduced to secure that end.

#### *Free Grants under the Immigration Act.*

The number of free grants taken up is rapidly increasing; thus,—

	Location	Orders issued.
1880 .....	16	977 acres.
1881 .....	29	1891 „
1882 .....	5	357 „
1883 .....	27	1297 „
1884 (six months)....	42	2809 „

Without venturing any opinion upon the policy of continuing the system of giving free grants under the Immigration Act, I may be allowed to point out certain defects in the practical working of the provisions of the Immigration Act, as far as this Department is concerned.

There is no possible reason why there should be any distinction between Land Orders and Land Certificates. The former is issued to people who have been approved by the Immigration Agents in England and have paid their passages out; it is of a money value of £18 for an adult, and is received in payment for any Crown lands selected or bought at auction. A Certificate is issued to a person who arrives as a cabin passenger from Europe or India having paid his own way; it is for a certain number of acres,—30 for an adult,—and is available only in payment for lands selected under the 24th Section of the Waste Lands Act, and the privilege of selection must be exercised within twelve months after the certificate is issued. These distinctions lead to great confusion; certificates are tendered at auction sales and refused; they are not made use of in time; they cannot be received in payment for land selected under the 38th Section of the Act, or for land in mining areas, and, in a majority of cases, an explanation of these matters evokes much angry feeling from those who have not mastered the needless intricacy of the subject. I would suggest that one document only should be issued; it should carry a money value, and be available for the selection or purchase of any available Crown lands.



*Revenue.*

The portion of Territorial Revenue derived from the disposal of Crown lands under the Waste Lands Act amounts as follows :—

1880 .....	£45,290
1881 .....	46,698
1882 .....	52,340
1883 .....	52,423
1884 (six months).....	33,100

The area of land sold during the past five years is as follows :—

1880 .....	38,000 acres
1881 .....	31,000 „
1882 .....	26,000 „
1883 .....	37,000 „
1884 (six months) ....	35,794 „

Thus it will be seen that settlement is progressing in a very satisfactory manner, and that the demand for land is increasingly active. Owing to the depression in mining circles, the demand for township lands has fallen off to a very large extent, and a great many allotments have reverted to the Crown; were it not for this the Land Revenue for 1884 would be the highest recorded since 1874, when lands were forced into the market in order to provide revenue.

Although the extent of land applied for will be much larger this year than for any of the last five years, no permanent increase of revenue should be calculated upon. A great many credit payments are maturing this year, and the number will increase each succeeding year as the full period of credit expires, so that whilst a great many new contributors will be added to our list, a great many old ones will be struck off.

It will be observed that the revenue derived from pastoral leases keeps up, although many large runs have been given up as useless, owing to selectors having picked out the eyes. There is no doubt that, owing to the multitude of other matters requiring attention, this Department did not look sharp enough after the pastoral rents, and much land was occupied without authority from the Crown and without payment of rent. So far as can be done in the Office, the arrangements for collecting rents are now improved, and no evasion is permitted. I anticipate that a material increase will be found in the amount of rent received consequent upon the recent appointment of a Bailiff of Lands and Mines. This officer is now engaged in the North-Eastern districts examining into mining matters; he is also compiling a list of selectors in the Piper District who have complied with the Residence clauses of the Waste Lands Act. As soon as he has finished these duties he will be instructed to report the names of all people he may find running sheep or cattle on Crown land without authority, and he will also exercise a general supervision over timber licences. Probably it will be found necessary to appoint a second Bailiff should the proposals embodied in the new Crown Lands Bill be passed into law.

*Forest Reserves.*

The following Forest Reserves have been set apart :—

West Coast, 8500 acres.	Lisle, 3000 acres.
Mount Bischoff, 1760 acres.	Branxholm, 5000 acres.
Beaconsfield, 3000 acres.	Tasman's Peninsula, 2500 acres.
Lefroy, 850 acres.	

Other reserves will be made wherever the Inspector of Surveys may observe suitable situations.

I have the honor to be,

Sir,

Your obedient Servant,

CHAS. P. SPRENT, *Deputy Surveyor-General.*

*The Hon. the Minister of Lands and Works.*

Hobart, 1st July, 1884.

SIR,

IN addition to a report that I had the honor to forward to you on the 22nd May, for the perusal of the Minister of Lands and Works, I beg to submit the following additional suggestions in regard to field operations for the future. As you do not mention the office branch, I confine myself to the out-door portion of the Department.

#### *Triangulation.*

As the greater part of the fully completed triangulation is confined to land long since alienated from the Crown, it would, I consider, at present be a source of great expense to the Colony, without commensurate return, to submit it to a proper test. I would therefore propose that the old piles should first be rebuilt, and afterwards re-observed, that surround the old base of verification at Longford; the old system to be reconstructed and added to, if need be, through the new districts fringing the north coast of the island, where settlement is every day on the increase. I trust that it may not be considered out of place for me to express my opinion that the present Trigonometrical Survey will be found very correct and good as regards the greater part of it when it comes to be tested, and it will be of the greatest value at present in checking the surveys that I propose should be made in connection with these stations,—namely, that True Meridian shall be determined say at two stations, and the result set off either East and West or North and South, in order to intersect at right angles, enclosing a series of rectangular blocks of land of, say 10 by 10 miles—to be considered either mere departmental reference surveys, and distinguished by numbers on the plans, or pending their being made parishes or hundreds by Act of Parliament, should such a course at any future time be thought advisable.

Boundary lines such as these should be carefully chained, and wherever practicable all the Trig. Stations about should be observed to prove the line. The result of that would be that the whole distance run out would be checked in parts against others of the same work, and would moreover have the original distance between the Trig. Stations to afford correction. The result would be a mean distance, that could be employed in gauging the value of the selection surveys, affording a double check against them. At present the various selections are blocked together, and have often a shifting tendency, till two or three clusters meet. By the method advocated above, the surveyor engaged in sectional work would generally be able to fix his work in its true position, and even if prevented at the time of survey of an isolated block on the score of expense, it would not be long before its true position could be definitely settled, thus endless trouble would be saved.

#### *Roads.*

I would respectfully draw your attention to my reports previously submitted as regards the survey of roads. I must respectfully contend that we should pay the District Surveyors for both sides of a main road when used as a frontage to sections; also that all new roads, whether in advance of selection or not, should be paid for sufficiently well to enable them to select a good road. Since I wrote my previous report I have been confirmed in my opinion that great carelessness is displayed very frequently. I know of two roads that have been surveyed, metalled, and thoroughly formed at considerable expense, which are so bad that eventually they will have to be altered, and in both cases had the surveyor paid attention to the nature of the country close to him there would now be no necessity for alteration.

The new Regulations that you did me the honor of submitting to me will, I feel sure, be a step in the right direction; at the same time I must admit that I consider some alterations will be necessary: however, they will have the effect of bringing the field-work into a proper system.

#### *District Surveyors.*

It appears to me that the fees contemplated are a little below Mr. Black's. I have never had an opportunity of seeing that gentleman's Report before to-day. There is no provision made for mileage to work as he advocates, which I must respectfully contend is very fairly and equitably put. For my own part I believe that if the Government retained the fees and paid the District Surveyors salaries, it would in the long run be found cheaper and better, and I have little doubt but that the Surveyors would prefer a certain, if smaller salary.

#### *Standard Chain.*

I would respectfully urge that Surveyors in forwarding each separate diagram append on it the discrepancy existing between their working chain and their standard at the time of actual survey; by that means it will be very easy to reconcile the difference that will occur when different chainmen are employed and different chains.

Corner pegs and absolutely correct permanent marks I am glad to see insisted upon by Mr. Black, for reasons that he gives in full. I do not think the Department should ever re-survey a block of land except for their own information.

#### *Assistant Surveyor.*

I venture to suggest that this gentleman and his party commence the rebuilding of certain stations near Table Cape, and then produce a true Meridian lately determined there by me, and connect it from time to time with these rebuilt trigonometrical stations in the manner advocated by me in the former part of this Report.

Old surveys, where joined on to and traversed up, should be paid for as connection lines, but only as regards immediate boundaries, otherwise I would suggest that special permission must be first obtained through me from you to enable the District Surveyor to effect such survey; without some precautionary measure of that sort the fees might become excessive.

*Forest Reserves.*

I trust it may not be considered out of place for me to urge that State Forest Reserves be established all over the Island, but at the present time principally in the new settled Districts where the wholesale destruction of very valuable timber is going on.

In conclusion, I beg to state that, though this Report might easily have been extended to any extent, I fail to see the advantage that would accrue. Trusting it will meet with the approval of the Honorable the Minister,

I have the honor to be,

Sir,

Your obedient Servant,

WENTWORTH M. HARDY, *Inspector of Surveys.*

*The Deputy Commissioner of Crown Lands, Hobart.*