SCAB LEGISLATION UNDER UNION.

AN EFFORT AT FINALITY.

THE BLOCK SYSTEM ADVOCATED.

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In view of the fact that the Union of the Cape Colony, Natal, the Orange River Colony and the Transvaal, will in a few months be finally accomplished, it may be advisable to anticipate matters, and raise the question (from a farmer's point of view) regarding the character of Scab legislation, which may be introduced after Union has been effected.

In connection with this, the most important point appears to be, whether one law will be passed, which will be applicable to all the States concerned, or whether each State will be left a free hand to frame its own scab laws. Some may favour the former course, whilst others again may deem it advisable that each State should be responsible for its own measures for the eradication of Scab. Many again, may be sceptical as to whether an Act could be framed, which might be applied to all parts of a country which differs in its climatic conditions to such an extent, as the Union of South Africa. However widely opinions in this respect may differ I am strongly in favour of one law for the whole country, and feel just as strongly that no harm can be done by the endeavour to sketch the frame work of an Act which might be applied in the manner indicated.

When we take into consideration the various laws for the eradication of scab, which are at the present time in existence, the manner in which these differ one from the other, and the dissimilarity of the regulations which have been framed to control the removal of sheep from one State to another, it will, I think be conceded that some assimilation is not only necessary in the interests of all concerned, but that such assimilation has now become imperative.

No one can consistently condemn legislation which is enacted to protect one part of the country, in which an effective law may be enforced for the eradication of scab, to prevent the disease being introduced from another part, in which the laws may be less drastic. Protection, in such a case, is imperative, and although the protective regulations may prove irritating and oppressive to some, the difficulty can easily be removed by the weaker and less effective laws being strengthened until they are placed on an equality with those in force in the neighbouring State. It thus becomes a matter of urgency that the unification of our scab laws, as well as the regulations which govern the removal of sheep from one part of the country to another, be taken in hand as soon as possible, and every portion of the country placed as far as practicable on an equal basis as regards the legislation for the eradication of scab.

In the August edition of the Agricultural Journal for 1899, I contributed an article on the scab laws at that time in existence in the several States now to be united, and thus, ten years ago, attention was
drawn to the necessity for unifying the different laws on scab eradication, as the following extract will show:

"I have already drawn attention to the fact that it is a matter of importance that all the laws at present in force (or which may be framed in the future) for the eradication of scab in South Africa should be assimilated as far as climatic conditions and the feelings of the people will allow. For any such purpose it would be necessary to call a conference of delegates representing the several States and Colonies interested in the subject. At this Conference the ground work of any general scheme for the eradication of scab could be discussed and as far as practicable a mutual understanding arrived at respecting the main details which it would be necessary to incorporate, and which would be generally adopted by the several Governments represented."

In order to do justice to all sections of the farming population who are effected by scab legislation, it will be my endeavour to look at the question, not only from the vantage ground of those who desire to see the disease eradicated, but also from the standpoint of others, who are partly or wholly indifferent, as to whether scab exists among their flocks or not. That there are many difficulties in the task I am undertaking is freely admitted, and possibly none are better acquainted with these obstacles than those who have for the past two-and-twenty years been engaged in combating them.

I am in hope, however, that others equally interested in the question of scab eradication will also contribute by giving their experience and opinions on a matter of such vital importance to sheep farmers throughout the country, so that some reasonable and adequate solution of the problem may be forthcoming.

In dealing with the subject there are many different phases of the question to be taken into consideration. For instance, there is the stock owner who resides in the coast belt, with a mild humid climate, which, although it conduces to the spread of the disease, at the same time renders it possible to treat the flocks by dipping without the least danger during the winter months.

Again there are the farmers who reside in what may be termed the Alpine regions, where the cold is intense during the winter, at an altitude of from six to eight thousand feet above sea level. In this part the weather is at times so severe that systematic dipping can only be carried out during the early part of the day when it is bright and warm. Again there are the districts to be taken into consideration in which the rainfall varies from twenty to thirty inches during the course of the year and the dry arid tracts, where from two to six inches of rain is the annual fall. There is the farmer who looks upon an outbreak of scab among his flocks as perhaps the greatest scourge which could befall him, and which means the loss in a direct, as well as an indirect manner of hundreds of pounds, and there is the stock owner, who, considering the disease as a persistent and expected visitor, never dreams of taking precautions to prevent the intruder trespassing on his farm.

There is the farmer, who, believing that scab can be stamped out, acts up to this belief and uses every effort to keep his flocks clean, and there is the man who, having been reared in an atmosphere of doubt and incredulity, and labouring under the impression that the scourge must appear with the advent of drought, loss of condition and other evils common to the lot of all farmers, neglects to take the most ordinary precautions to deal with the pest. Among this latter class the conviction is strongly implanted that with rain and improvement of the veld the sheep, however badly diseased, will, as a natural consequence, throw off scab and regain health without any treatment or interference on the part of the owner.
With such a combination of difficulties to face, with the urgent call from one side for more stringent legislation, whilst from the other the cry comes for relaxation and concessions, the position becomes more difficult to face the longer it is delayed. It can hardly be a matter of surprise, under the conditions mentioned, that the war waged against scab during twenty odd years with what cannot be termed other than antiquated weapons has failed to make much impression on the enemy.

Before commencing with a sketch of the proposed legislation I wish in the first place to deal with the scab laws which were in operation between 1887 and 1895, and the results which have been attained during the past two and twenty years. Secondly to briefly consider the defects of the said legislation and then pass on to the remedies which I consider should be applied in the future.

In the first place let us glance at the state of the stock in that part of the Colony in which the Act of 1886 was proclaimed. In this portion, comprising twenty-six districts, the feeling was by no means general in favour of scab legislation, for there existed from the enforcement of the law and even up to the time that the compulsory Act was proclaimed, strong and bitter opposition on the part of a fairly numerous section of the farming population. This opposition, although of a passive nature, proved exceedingly difficult to deal with, for it not only created endless obstacles, but was the cause of much unrest and continued agitation against the provisions of a law which was of the mildest possible type. Prior to 1887 it was the exception to find a clean flock and it was equally the exception for such a flock to remain free from scab for longer than three months. Infected stock were freely and continually brought for sale to public centres and moved about the country to the annoyance and detriment of those who were anxious to keep their sheep clean. When the Act of 1894 came into operation it might be said that it was the exception to find scab in by far the larger portion of the part referred to and the farmer who continued to breed the pest, or who did not immediately stamp out the disease when it appeared among his flocks, was a marked man in the community in which he resided. It seldom happened that infected stock was brought to public sales, or was driven along main roads, and when this did occur, the fact was immediately reported to the Inspector. Those who maintain that no improvement was effected by the enforcement of the scab laws of 1886 and 1888, are apt to overlook the above facts, and, judging by their present surroundings, forget the condition with which they were at one time accustomed. Again an enormous amount of ground work and foundation for more stringent legislation was laid. Hundreds of dipping tanks were constructed and generally speaking education in matters relating to scab and its treatment progressed favourably. The Scab Acts of 1886 and '88 were productive of much good in another direction, for owing to the prevalence of the disease, farmers, with few exceptions, were compelled to shear their sheep twice during the twelve months, and thus there was always an enormous quantity of badly grown short wool thrown on the market. Skins too, were depreciated in value owing to the ravages of the scourges and large portions of every consignment sent to the sea ports were rejected on this account. At the close of 1894 the position had entirely altered in the districts in which the earlier Acts were in operation, clips of wool of less than twelve months growth were seldom heard of (excepting when grown by native owners), skins were vastly improved in value, and the wool forwarded from districts inhabited by natives was in great demand, on account of its freedom from scab. If anyone maintains that the expenditure incurred through the administration of the scab laws has been money wasted, let him pause and consider the position of the sheep farmer
in the country prior to 1887 as compared with that which existed at the commencement of 1895.

The laws of 1894 and 1899, although they have certainly not proved as effective as those of 1886 en '88, have at the same time caused reform in many directions. In those parts in which the first legislation was introduced, the disease has in some districts almost entirely disappeared, and had adequate protection been afforded, a large tract of the Eastern Province would at the present time have been entirely free from scab. In those districts which adjoined, or were situated near the area in which the first laws were enforced, the stock owners were more or less prepared for scab legislation and when the general Act superseded the permissive law, little or no trouble was experienced by the Inspectors in the performance of their duties. If, however, the whole of the Colony proper is taken into consideration the results as they appear to-day, are certainly not what might have, with reason, been expected. Passive opposition is still offered in a large portion of the country and stock owners have not accorded co-operation which is one of the essentials to success. Thus the disease is still exceedingly prevalent in a good many districts and will continue to be in the ascendant until a more united and determined front is shown in the fight against the pest. In summer after the dipping of the flocks the wave of scab recedes, only to sweep up again with increased virulence as the winter passes into early spring, when high water mark is reached and the percentage of scab attains the maximum.

In reviewing the past in the light of to-day, it would appear that the enforcement of the general act was somewhat premature and that it would have been a wiser policy to extend the operations of the law by gradual steps and thus have accustomed stock owners to the provisions of an act, which to many was the essence of all that was objectionable and arbitrary.

Secondly:—It would be absurd for anyone to deny that some beneficial results have not been attained during the past fifteen years, a period interrupted by war and disastrous droughts, for even the most casual observer must admit that a certain amount of educational progress has been made. In many districts the disease has been reduced to a minimum and those who have cleaned their flocks now demand protection from re-infection. This protection, however, is not adequately provided for in our legislation and hence work accomplished by the careful farmer is often undone by the neglect of others. It is this lack of protection that causes many stock owners to look upon the scab acts as defective and urge the repeal of the laws, which are complied with by some and openly opposed by others. The absence of the necessary protection is I think one of the weakest points in our legislation. We build up with the one hand, only to break down the structure erected at great expense and labour, with the other. Ground is gained every summer, only to be lost again during the winter. Can this be a matter of surprise when we consider the anomalies of a law which compels the cleansing of stock under certain pains and penalties and allows the disease to be spread from farm to farm and from district to district by the removal of infected sheep under no less than four different sections? No one part of the country is safe from the invasion of diseased stock which the law permits and sanctions to be removed. Again, the Act which provides for the cleansing of sheep does not compel the farmer to destroy or disinfect the infected premises in, or on which the diseased flock has been kept. The Inspector is permitted under certain conditions to undertake the cleansing of stock, but dare not, unless with the permission of the owner, attempt the treatment of the kraals. These are sanctuaries for the preservation of the Scab mite, incubators for the propagation of the species and a prolific source of infection
for the future. Another fruitful method for spreading the disease is to be found in the removal of infected sheep from one farm to another for the purpose of dipping, for no owner can be compelled to construct a tank on his own farm in which to treat his sheep, provided he can obtain from his neighbour the right to use his tank. It might be thought that the man who had cleansed his sheep and farm from scab, would naturally object to infected sheep being driven over his ground to be dipped. In this matter, however, sentiment plays no mean part, and many a farmer would rather suffer loss in this respect than offend his neighbour by refusing the use of his dipping appliances.

Again the privilege accorded to the farmer or speculator to issue his own pass for the removal of sheep has during the past been the means of spreading the disease far and wide, and it is only necessary to quote a few figures from my annual reports to show how grossly the liberal provisions embodied in the Act have been abused. For instance, among one hundred and twenty-six infected flocks removed during last year into six of the Midland Districts, no less than one hundred and twenty were removed by owners who had granted their own passes. During 1907, ninety-one infected flocks were introduced into the division of Oudtshoorn and seventy-six of these were brought in under owners' passes. It may be deemed an exaggeration when I state that quite three-fourths of the flocks which have been infected during any winter and declared as clean by the inspector at the close of the year, have never been thoroughly cleansed. The usual course adopted when an outbreak of scab occurs, is to place the infected sheep in quarantine and if the stock do not show visible signs of disease when the period allowed expires, the order is cancelled, and the owner is at liberty to move his stock to any part of the country on his own certificate. Now, as I have already mentioned, quite 75 per cent. of the stock thus released from quarantine have never been cleansed, for scab has only been suppressed and is certain to appear again in a few weeks' time. I maintain that no flock or farm should be declared as clean until at least three months have elapsed since the last signs of disease were noticed.

Lastly, the formation of Scab Boards in each District, and the power given to these bodies to nominate men for the position of sheep inspector has not proved a success. True, in some districts in which the stock owners are in favour of the eradication of scab, good men have been recommended, but in a large part of the Colony the nominations have been anything but satisfactory. In many instances the officers appointed have had to serve a lengthy apprenticeship at the expense of the country, and in the end have frequently proved failures.

Thirdly, as regards the remedies which should be adopted in future legislation, I have already mentioned that these should be of a sufficiently elastic nature to prove adaptable to all parts of the country. The difficulty then is to secure the required elasticity, necessary to meet every emergency as it may arise, and at the same time not impair the general efficiency of the law in any material manner. These considerations, I believe, would be secured if the cleansing of the flocks was undertaken in sections or groups of districts, a system which I have advocated since 1897, and by which I am firmly convinced the desired end will be attained in a much shorter time, as well as in a more economical manner, than by any other method which has hitherto been adopted or suggested. My reasons for advocating this system for the eradication of scab in preference to other methods, are, because in the first place a small area can be treated in a much more thorough manner than a large extent of country. When the fact is taken into consideration that in treating the stock of the Cape Colony alone some 276,935 square miles of territory and over 27 million sheep and goats have to be dealt with, it will be admitted that the undertaking is not only a large one, but one which will require unlimited tact,
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skill and powers of organisation. In the second place it would be impossible to secure a sufficient number of trained and competent men to administer the Act with any degree of success in all parts of the Colony at the same time. We would, doubtless, persevere in our present work by amending the laws now in force, so as to remedy the weak points. We might throw the responsibility of cleansing infected stock solely upon the owners of the same, or provide for the dipping of scabby stock under competent supervision. All this, it is true, might be effected, but only at considerable expense and loss of time, and we would probably fail to secure the co-operation of the farmers in a large part of the country, who, as they are opposed to the present milk and water legislation, would naturally object to more stringent measures being adopted. In attacking the scab mite by means of the Block system, there are certain lines which must be followed, if success is to be attained. To neglect these would prove disastrous. Failure to eradicate the disease, owing to defects in the law, framed for that purpose, weakness in the administration, or carelessness or ignorance on the part of those who are appointed to supervise the work of scab eradication, would have a most detrimental effect, especially on those who are at present opposed to such a law, and who maintain that scab cannot, and never will be eradicated. If the question is attacked with the determination to conquer the disease and eradicate it once and for ever, then the greatest care must be exercised in framing the measures to be adopted so as to guard against any weak points or flaws in the legislation, and to ensure that every compartment is water-tight and leakage carefully avoided. What is really required is a law containing the minimum number of sections possible, combined with the highest degree of common sense which can be secured.

My suggestion is that the whole Colony be divided into four sections or blocks. The partition of the country into these blocks would no doubt prove a difficult matter, but the question is certainly not insoluble, and if due attention is paid to the ordinary trade routes and markets, but little inconvenience would be experienced by those who are included in the first area or block to be attacked. The following division of the Colony is suggested as one which might suit all requirements:

Block No. I. to consist of all districts east of, and inclusive of, the following divisions:—Albert, Steynsburg, Middelburg; Graaff-Reinet, Murraysburg, Aberdeen, Willowmore, Uniondale, and Knysna. In this area there would be approximately 89,218 flocks containing 14,736,496 sheep and goats.

Block No. II. to include Bechuanaland, and the divisions of:—Barkly West, Britstown, Colesberg, Hanover, Hay, Herbert, Hopetown, Kimberley, Philipstown, Prieska, Richmond, and Victoria West, in which area there would be 11,633 flocks with a total of 5,714,203 sheep and goats.

Block No. III. to consist of the following divisions:—Calvinia, Carnarvon, Clanwilliam, Fraserburg, Kenhardt, Namaqualand, and Van Rhynsdorp, the small stock in this area totalling 5,192 flocks and 2,281,183 sheep and goats.

Block No. IV. to include the South-western districts bounded by and inclusive of Piqueberg, Ceres, Sutherland, Beaufort West, Prince Albert, Oudtshoorn, and George, which area would contain 7,774 flocks and 3,509,394 small stock.

One great advantage to be derived from the partition of the Colony would be, that whilst cleansing operations are being carried out in the first Block attacked, the farmers residing in the remainder of the country would be to a certain extent prepared for the cleansing of their flocks, when the time arrived for the assault to be pushed home in the remaining
blocks. Thus, we might reasonably expect that instead of opposition, a more cordial feeling would exist and greater co-operation accorded, than was experienced when the Act of 1894 was enforced. A further, and by no means unimportant advantage, is also to be gained by the adoption of the block system, and that is, the possibility of securing the services of trained and experienced men, when the attack has to be most fiercely made. In the first block in which cleansing operations are commenced, all the best men available should be concentrated. Thus, when the second block was to be assaulted, there would be an experienced staff ready for transfer when the proper time arrived, and this would be repeated until each block has been cleansed. It is mainly this consideration which has led me to carve out the first block from the Eastern and Midland districts, and to frame it of such a size, that when the area has once been cleansed, there would be sufficient trained men available to commence work in the second block, and at the same time to permit of the required number remaining to guard against, and stamp out any outbreak of disease which might possibly occur. As I have already mentioned, this is by no means an unimportant consideration, for I am convinced that the value of such a trained and experienced staff cannot be overestimated. One of the faults of the past has been the idea that any man, who has the least knowledge of farming matters, and at times no experience at all, could be turned into a ready-made inspector capable of instructing and guiding others at very short notice. I trust that no such delusion will be held in the future, but that the services of the best men available will be secured, even though the expenditure incurred may be heavy.

The main lines in which the legislation necessary for the working of the Block system should be framed are as follows:—

(a) The appointment of all officers to administer the Scab Act to be left entirely in the hands of the Minister who is responsible for the administration of the law.

(b) The cleansing of all scabby flocks, as well as the treatment of infected kraals, premises, and sleeping places, to be carried out by, or under the supervision of, the officers appointed for such purpose.

(c) The simultaneous dipping of all sheep and goats during the months of April and May in each year under supervision.

(d) The introduction of sheep and goats into or through any block which is being, or has been treated, to be entirely prohibited.

(e) Every farmer to have his own tank and dipping appliances.

(f) The use of sulphur and lime, or sulphur and soda only to be permitted.

(g) The imposition of heavy penalties, for failure to report outbreaks of scab, the removal of infected sheep, or the introduction of small stock from outside the block cleansed or in process of treatment.

If measures of the abovementioned nature are adopted and carried out in a firm, fearless and impartial manner, the staff concentrated in the first block, could within a period of eighteen months be materially reduced and the majority of the men transferred to Block No. 2.

As regards the appointment of officers to administer the Act I must take the liberty of again quoting from my article published in 1899, in which the following remarks occur:—

"The principles adopted in any general scheme of scab legislation should be somewhat on the following lines:—

"(c) Provision to be made for the promotion of deserving Inspectors—my opinion is that there should be three grades, first, second and third, with corresponding increases of salary for each step gained. The
rise in emoluments should be solely on merit, gauged by the quality of the work performed. This would offer a healthy inducement for men to attain the higher ranks and on the other hand the system would afford the Government the means of showing disapproval of any carelessness or neglect. An alternative punishment would thus be provided when the offence committed by any member of the staff was too serious to be met by a reprimand and yet not of sufficient gravity to warrant the summary punishment of dismissal, the inspector at fault could be reduced to a lower grade.

With respect to the class of men who should be appointed as Sheep Inspectors this can perhaps be illustrated in no better manner than by referring to the evidence given before the Scab Commission at Carnarvon in April, 1893, when Mr. A. J. Vorster, in answer to certain questions, said:

"As far as that goes I would like myself to be under such personal inspection of somebody who knows more than I do. I think it might be a farmer of the kind, but a man altogether independent who does not belong to this district."

Mr. Vorster, in the above replies, struck the correct note: for we require inspectors to be men who are in advance of the general class of farmer; who can advise them as to the proper measures to adopt, and who have had sufficient experience to guide and direct those whose stock come under their control. Such men should only be appointed when they have satisfactorily passed a severe practical examination, and thus proved themselves thoroughly qualified in every way for the position of sheep inspector. Above all things the Inspector should be a stranger in the district for which he is appointed, and the Government should have the power at any time to transfer him to another area, when such a course is considered desirable. As an example of the difficulty at present experienced in this respect I need only quote one case in a certain district in which there are three inspectors, who shall be named A, B, C. A. is the son of B, and son-in-law to C, whilst B. and C. are cousins. Can it be expected that when inspectors in the same district are related in this manner, and at the same time connected with many farmers in the area which they supervise, that matters will be worked in an impartial or satisfactory way; or the provisions of the Scab Acts properly carried out. Experience has shown that even with our present legislation, scab can be eradicated, provided the inspectors are qualified men and secure the co-operation and support of the stock owners in their areas. On the other hand, when the officers appointed are incompetent and the majority of farmers opposed to Scab legislation little or no advance can be made towards the desired end.

We now pass on to the cleansing of scabby flocks and the treatment of infected kraals, etc. In this respect it is imperative that in every case the work should be carried out under supervision for which purpose well qualified men should be appointed to deal with each case as it may occur under the direction of the local sheep inspector or assistant of the area. Infected kraals, premises and sleeping places, must be destroyed by fire, or when that is impracticable, enclosed in a suitable manner. This is also a consideration of the greatest importance, for recent experiments have proved that in such places the infection can remain in a dormant state for at least three years and possibly for a longer period. It may be deemed an exaggeration (especially in view of the fact that scab legislation has been in force throughout the Colony for the past fifteen years) when I repeat the statement that fully seventy-five per cent. of the farmers do not dip their sheep in a methodical and effectual manner. I am convinced, however, that my contention in this respect is well within the mark, and if I have erred in any way, it is in an underestimate of the
percentage given. The majority of farmers either mix their dipping ingredients below strength, or the stock are hurried in at one end of the tank and out at the other, before the dipping mixture has penetrated to the skin. As an example of the spirit of false economy which is practised by some farmers, I may quote the following instance which recently occurred in one of the north western districts. One of my assistants happened to arrive on a farm just after the sheep (which were infected) had been dipped and learnt that between sunrise and 11 a.m. the same day, some 1,800 sheep had been put through a mixture consisting of 600 gallons of water, to which four gallons of a carbolic fluid had been added. When it is explained that to dip this number of sheep in a proper manner in the appliances available on the said farm would occupy at least two days, and the printed directions attached to the dipping mixture used, require that one gallon should be used to fifty gallons of water, it will be at once apparent that treatment of the nature mentioned must be productive of more harm than benefit to the stock concerned. This is by no means an exceptional case but is an instance of how dipping is carried out in many parts of the country. I maintain therefore, that it is imperative that all cleansing operations should be conducted under proper supervision.

Thirdly, as regards a simultaneous dipping in the autumn. It has already been shown that scab invariably increases during the winter months, and generally at a time when the stock are in their lowest condition, and either just before, or during the lambing season. If proper precautions are taken in the summer months when the weather, as well as the condition of the stock are favourable, there would be little or no reason for dipping during the trying time of winter. The thorough treatment of stock and premises is, however, too often neglected when the conditions are propitious and this neglect frequently accounts for the remonstrances which are heard against treating the sheep in winter time. During the simultaneous dipping, all flocks (with the exception of those which have remained clean for twelve months or longer) should be dipped twice within from ten to sixteen days, and at the same time kraals and premises which may be deemed a source of danger should be destroyed or enclosed. The dipping, as well as treatment of kraals must be carried out under supervision and flocks which have remained free from scab for twelve months or longer dipped but once. If the autumn dipping is done in a painstaking and thorough manner, there would be little fear of the disease appearing during the winter months.

In connection with the removal of sheep while the block system is being conducted, there is but one road to success and that is by rendering each Block a water-tight compartment and prohibiting the introduction of any sheep or goats from outside the area under treatment. Here we are face to face with a dividing line and the difficulty of keeping that boundary intact will be at once apparent. It is a difficulty, however, which must be faced and can only be overcome by the greatest vigilance on the part of the border inspectors, the entire co-operation of the stock owners on the boundary and the imposition of extremely heavy penalties for any contravention of the law. The removal of sheep within the Block is a matter which can be dealt with at a later date, but I see no reason why clean stock should not be allowed to leave the area which is under treatment.

We now pass on to the matter of dipping tanks, and here again there can be no question as to the course to be adopted, for every farmer must construct or provide a tank on his property. The time for suppressing the disease has passed and if the solution of the question is to be approached in the true spirit, the law should provide that no infected
stock may be removed from the ground on which they are grazing until a thorough cure has been effected.

As to the ingredients to be used for cleansing purposes, I have but one suggestion to make, and that is that only sulphur and lime or sulphur and soda be authorized. These ingredients have no equal as far as their curative properties are concerned, and in addition to this they act as preventives to re-infection for a much longer period than any other preparation known in this country. When scab has once been eradicated, by all means allow farmers to use whatever ingredients they may select for the destruction of ticks and keds, but until the desired goal has been attained, the use of the dips I have mentioned should be made compulsory.

Lastly—the law must provide for heavier penalties for the punishment of those who fail to comply with its requirements. Take the case of an owner who fails to report an outbreak of scab among his sheep, and thus endangers the safety of thousands of clean stock which may be grazed on surrounding land. A penalty of even £20 would be inadequate, for when the source of infection had been discovered, the work which may have cost hundreds of pounds to accomplish may have been undone. Or again take the instance of the man who may introduce infected sheep into the Block already cleansed or under treatment, could it reasonably be expected that a paltry fine would satisfy justice or act as an intimidation to others to avoid the same action. Many speculators at the present time reap a rich harvest by removing infected sheep, knowing full well that if they are perchance caught in the act of transgressing the law, the punishment inflicted will only diminish their profits by a very small amount. If substantial fines are provided for in the new law, there will at least be no inducement offered to men to contravene its provisions.

I have endeavoured to give, in the foregoing, the bare outline of a law, which I believe, if it were strictly and impartially administered, would in a reasonable time (say six years) serve to stamp out Scab in the country. Much, however, remains to be filled in before the sketch can be completed, but if such details are added in the honest endeavour to construct a Bill for the eradication, and not merely the suppression, of the disease, I for one have not the least doubt as to the ultimate success of the measure.

It remains now to consider briefly the nature of the law which should be enforced in that part of the country outside the Block or blocks under treatment. In order to secure co-operation on the part of the stock-owners, I consider that it would be advisable to allow the present Scab Acts to remain in force, with the addition of a few amendments which would refer solely to the removal of infected sheep.

In the Scab Act of 1894 there are three sections which permit of infected sheep being removed. These are: Section 37, which allows of the removal of infected sheep for the purpose of slaughter after one dipping has been administered; Section 38, which sanctions the removal of scabby sheep during periods of drought, when the stock have either been hand-dressed or dipped; and Section 41, which allows scabby stock which belongs to servants or bywoners to be removed after one dipping. These clauses, which I maintain are responsible for most of the scab in the country, should be repealed. For all purposes, however, the removal of infected sheep may be classified under two heads, as follows:—

(a) for purposes of speculation or slaughter, and
(b) for change of pasture.

In the case of sheep which are intended for barter or slaughter there exists no reason whatever why such stock should be removed in an infected state, for if sheep are in fit condition to be sold, they can certainly be cleansed prior to removal without any detrimental effects. In this instance, at least, no plea can be raised that the low condition of the stock would militate against dipping being carried out. Moreover, it would
certainly be to the advantage of both seller and purchaser if the stock in question were clean and healthy. The Scab Commission, which travelled through the Colony in 1892-93, although recommending that infected slaughter stock might be removed after one dipping, clearly indicated in their report that such stock should be again dipped at an interval of fourteen days if they had not reached their destination or all been slaughtered within that period. This, however, was not embodied in the legislation of 1894, and hence we have the continual danger of scabby stock with the disease only partly cured, being driven all over the country. Removals of the abovementioned nature should be entirely prohibited, and if this was done a further inducement would be offered to careless farmers to keep their sheep in a clean state. The removal of sheep for change of pasture is confined to a very great extent to what is termed the North-West Area, which is defined in the Scab Act of 1899 as comprising the following districts:—Calvinia, Carnarvon, Ceres, Fraserburg, Kenhardt,Namaqualand, Prieska, Sutherland, and Van Rhynsdorp. It is true that in some of the Midland Districts many removals of infected stock have been effected during recent droughts by means of Section 38, which permits of scabby sheep being moved under certain conditions. It is in the North-West Area, however, that most of the removals under this clause take place. If we glance at the evidence taken by the Scab Commission in 1893, it will be found that in the North-West the majority of the witnesses examined were opposed to scab legislation of any kind, and the Commissioners when dealing with this portion of the country report as follows:—

"The principal arguments advanced by certain farmers residing in the North-Western and Western Districts against the possibility of such districts being placed under scab legislation were the prevalence of drought and the scarcity of water, which would prevent their complying with the restrictions on the removal of scabby stock, though they appear to overlook the danger to clean flocks by such movements."

Exactly the same arguments prevail at the present time, and as in 1893 the majority of witnesses examined before the Commission maintained, that scab was not contagious, that when the seasons were favourable the disease disappeared without any action being taken by the owner of the stock, so to-day it is contended that the dipping of sheep is injurious to the animals treated in dry seasons and unnecessary when the pasture is good. In the evidence above referred to many witnesses expressed the opinion that the transit of infected sheep over clean farms should be prohibited, and one farmer remarked before the Commission that:—

"I am doing my best to keep down scab. It does not help me much, because according to the practice in this country there is continual trekking of scabby flocks over my property, which lie about and rest there for a certain time. I have neighbours who don't take the same view as I do, and are not particular in dipping, consequently my sheep become infected, and I am put to expense, and require some protection in the shape of a law."

Even with the Scab Acts of 1894 and 1899 in operation, the same position as that above quoted obtains at the present time, and the farmer who wishes to keep his stock clean cannot do so, by reason of the large number of infected sheep moved about the country.

The crux of the whole question lies in the fact that when the seasons are favourable and stock in good condition, the great majority of farmers in the North-West do not take proper measures to cleanse their stock, as they believe that Nature will work the needful cure without the intervention of the owner. If the farmer undertook the cleansing of his flock...
when the disease first appeared there would be no reason why he should be hampered or delayed in any way when the time comes to remove the sheep. Procrastination and temporising has, however, played such an important part with many stock-owners that everything in the form of cleansing is put off from day to day, and when the climax does come, it as often as not finds the sheep in an infected state. A little foresight exercised by the stock-owner would have prevented untold loss and misery, and at the same time saved the lives of thousands of sheep.

It is in the North-West we have always experienced the greatest difficulty, and it is from this part of the country that scab has spread broadcast over a large portion of the Colony. The questions may, therefore, be asked: Is it reasonable that such a state of affairs should be allowed to exist any longer, and is it imperative that the removal of infected sheep should be permitted even in this part of the country? My answer to these queries is as follows:—In the first place, it is an injustice to careful farmers to allow scabby stock to trek over their farms. It is also a false policy to permit the farmer to remove his flocks until they have been cleansed, for the careless owner will never take the necessary measures to clean his sheep, whilst he has the alternative of moving infected stock. Secondly, I maintain that there is no reason why any scabby flocks should be permitted to move about the country, and in connection with this I must again refer to my article published in 1899, in which the following occurs:—

“If during a period of drought sheep should become infected with scab, the opinion of many farmers seems to be that to attempt cleansing operations would be detrimental to the condition of the stock, and might render them less able to withstand the severity of the season. Arguments of this nature are as cruel as they are fallacious. Scab and poverty combined tell more upon the condition of the animal than poverty alone. Too often the dumb animal is left to contend with its worst enemies—disease and drought—without any effort being made to alleviate the sufferings which any farmer has it in his power to accomplish. The whole question simply resolves itself into this, that under our present system of scab legislation the inducements offered to the farmer for the suppression of scab are greater and infinitely more attractive than those embodied in the law for the eradication of the disease.”

When it is contended that sheep should only be removed in a clean state, the questions naturally arise: whether stock can be cleansed in the North-West, and if it is always practicable to dip sheep in a proper manner? To both of these queries I have no hesitation in replying in the affirmative. My contention is that scab can be eradicated much more easily in the dry climate of the North-West than in the damp, humid coast districts. The very disabilities mentioned by some witnesses from the North-West who appeared before the Scab Commission, viz., the vast extent of the properties owned by farmers, is in itself one of the advantages denied to stock-owners in the Eastern Province: for it enables the farmer to graze his stock on clean pasture when a cure has been effected. The plea that the water is too salt to assimilate with the dipping mixtures generally used by farmers has also proved to be without foundation. Even the worst waters found in the North-West can be used with the most effective results when sulphur and lime or sulphur and soda are selected to dip with. Scarcity of water has also been raised as an excuse why dipping cannot at times be carried out, but even this is disproved when careful inquiries are made. Take, for instance, that portion of the North-West known as the Kaiken Bulte. Thirty years ago the traveller had at times to proceed sixty miles at a stretch before water could be procured
for his horses or cattle. The energy of man, combined with a slight expenditure, has altered these conditions completely. The same results can be obtained on any farm, and in nearly every instance but little labour or capital is required to procure the necessary supply of water. On this point the evidence given by one of the farmers of Fraserburg before the Scab Commission is worthy of repetition. The question (No. 13,561) being asked: "Are you aware that on the majority of farms in this district there is no water to be found, even when they have sunk or dug wells?"—the following answer was given: "No, such is not the case. If you dig for 25 or 30 feet anywhere in the district you get water. In the district of Williston sometimes it is bitter, but then it is just as good for dipping."

Those who in 1893 objected to scab legislation brought forward many arguments against the introduction of such a law, and these, which were repeated before the Commission with an unvarying persistency, may be summarised as follows:—

Answer 13,025.—I never dip; my sheep get clean when the rain comes.
Answer 13,137.—They (the sheep) cure themselves; just give them better veld, and it grows out in no time.
Answer 13,299.—It is no good to dip sheep when they are falling off in condition, as instead of cleansing them, you might kill them.
Question 13,490.—Do you believe that scab is spontaneous?—Answer: Yes.
Answer 13,527.—Dipping does them (Cape sheep) more harm than scab.

The opinions expressed in 1893 are still held at the present time by the majority of farmers in the North-West. Converts there may have been, but these are few in number, and in many instances are afraid to express their opinions in an open manner. Those who still persist in holding the opinion that scab is spontaneous, and that dipping is of no avail either when the seasons are good or bad, have been more than ever convinced that their arguments are correct, owing to the failure of the legislation introduced to effect any improvement of a permanent nature.

The facilities which exist for the removal of infected sheep in our present laws do not tend in any way to induce the careless farmer to clean his stock. As a rule, the majority of owners in the North-West farm with Cape or cross-bred sheep, and thus the production of wool with such men is not a matter of any consideration or importance. The main object is to dispose of the surplus stock, and if this can be arranged by once dipping the sheep to be sold, the question is asked, why should additional expense as well as labour be involved in dipping all the sheep on the farm?

If the facilities allowed in the Scab Acts for the removal of scabby sheep were withdrawn, an additional impetus would be offered for the cleansing of infected sheep, and we may hope that some substantial progress would be made in that direction.

If the Acts of 1894 and 1899 are altered as I have suggested and kept in operation in each block until the time arrives to attack that area by means of the legislation which has already been proposed, I see no reason why the disease should not be eradicated within a period of six years. If such a scheme is accepted in the Cape Colony, it might with equal force be applied to the whole of South Africa. All that is necessary is one determined and combined effort, and the greatest obstacle to successful sheep farming in South Africa would be overcome.