

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN MANITOBA  
AND N.-W. T.

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WALTER E. GUNN, BUSINESS MANAGER.  
A. G. HOPKINS, D. V. M., B. S. A., EDITOR.  
F. S. JACOBS, B. S. A., ASSOCIATE EDITOR.

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### Publisher's Announcement.

Mr. W. J. Black, B. S. A., for the past two  
years editor of the "Farmer's Advocate and  
Home Magazine," has accepted the position of  
Deputy Minister of Agriculture in the Manitoba  
Department of Agriculture, rendered vacant  
by the resignation of Mr. H. McKellar, former  
Deputy, and will shortly enter upon the duties of  
that office. We congratulate Hon. Mr. Roblin,  
the Premier, upon his choice, though we must  
confess that the habit into which our statesmen  
have fallen of picking out their leading officials  
from the "Farmer's Advocate" staff is becoming  
rather monotonous. A native of Dufferin Co.,  
Ont., and a graduate of the Ontario Agricultural  
College, Mr. Black will bring to his new work  
knowledge of its needs, energy, enthusiasm, execu-  
tive ability, and gifts as a speaker, as demon-  
strated in Farmers' Institute and judging-school  
work, that will lend great strength to the admin-  
istration of the Department. Dr. A. G. Hopkins,  
whose prominent position and work as associate  
editor for several years past, have made a very  
marked impress on the West, succeeds Mr. Black,  
and he will have a strong ally as associate  
editor in Mr. F. S. Jacobs, B. S. A., a thorough-  
ly informed and capable agricultural journalist of  
several years' experience. In addition to his  
practical knowledge of farming, he is also a grad-  
uate of the O. A. C., taking his degree at the  
same time with Mr. Black. Subsequent to  
graduation, he spent considerable time in Mani-  
toba and the Northwest Territories, becoming ac-  
quainted with the system of farming, conditions  
and needs of this country.

### Should be in Every Farmer's Home.

Enclosed find \$1.50 for one year's subscription  
to your valuable paper. I think it is an ideal  
paper, and should be in every farmer's home.  
Russell, Man. W. G. ROBB.

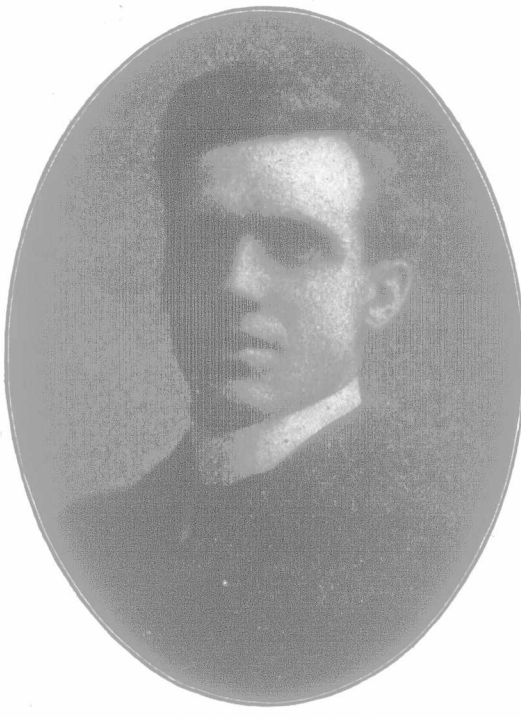
## Horses.

### An Authority on Glanders.

Prof. John McFadyean, the great veterinary  
authority of the English-speaking world, speaks as  
follows re this serious disease of horse, ass, and  
man:

Glanders was traceable back to the earliest  
days of medical literature. Aristotle, Hippo-  
crates, Apsyrus and Vegetius, all described the  
symptoms of glanders. The earliest English  
writer to mention glanders was Herbert, who  
wrote on Husbandry in 1523. He mentioned farcy  
as well as glanders, but did not recognize their  
relation to each other. He described glanders as  
contagious, and incurable when it reached the  
stage of "mourning at the chine." Markham in  
1662 described glanders and farcy, but did not  
seem to be aware that they were interchangeable.  
A translation of Soleysell by Hope in 1717 re-  
ferred to glanders as a most dangerous and malig-  
nant disease. About the close of the 18th cen-  
tury a number of writers devoted some attention  
to the disease, but it was to a Danish veterinar-  
ian, Viborg, that credit must be given for first  
arriving at the truth that glanders and farcy were  
one and the same disease; that they spread by  
contagion, and were due to a fixed virus which  
was destroyed by heat and desiccation.

In England St. Bel, the first Professor of the  
Royal Veterinary College, recognized the danger-  
ous and contagious nature of glanders, as did  
his successor—Professor Coleman. Ventilation  
was Coleman's special hobby, and not unnaturally  
he taught that although the disease was con-  
tagious it might be generated in dirty stables by  
impure air. Many writers in the first half of the



W. J. Black, B. S. A.

The newly-appointed Deputy Minister of Agri-  
culture for Manitoba.

19th century arrived at the conclusion that farcy  
and glanders were interchangeable, and that both  
were contagious, but very few believed that they  
arose and spread only as the result of contagion.  
Not until Loeffler and Schutz in 1882 discovered  
the causal organism was it definitely settled that  
glanders could not arise de novo. Probably only  
during the last twenty years has this belief been  
generally accepted.

Glanders is specially an equine disease, and if  
all glandered horses could be destroyed the dis-  
ease would be exterminated. It is due to a  
micro-organism—the bacillus mallei, a tissue para-  
site seldom found in the blood, even in acute  
cases. It presents the appearance of a non-  
motile rod, but in some cultures gives rise to a  
thread-like formation. It is easily cultivated on  
sterilized potato, grows readily at a temperature  
of from 97 to 100 degrees F., causing on the third  
or fourth day a yellow discoloration, which be-  
comes darker in time, occasionally reaching a  
chocolate brown, which is very characteristic. In  
bouillon it causes turbidity, with a surface growth  
and a tenacious ropy sediment. Staining the  
bacillus in tissue sections is difficult, especially in  
old lesions when the organisms are few.

Thorough disinfection of infected articles or  
premises is not difficult. The vitality of the  
bacillus is not great, being destroyed in a short  
time by exposure to sunlight, and by such sub-  
stances as carbolic acid and corrosive sublimate.  
The bacillus retains its vitality in ordinary clean  
water for some 10 or 15 days, and silk threads,  
which had been saturated with pure cultures and  
then dried, were found infective as long after as  
80 days. In ordinary positions, such as are af-  
forded in stables, the bacillus has to contend with  
other organisms which impair its vitality. The

old notions of the necessity for destroying old in-  
fected buildings to get rid of infection are entire-  
ly wrong. The cases in which glanders has broken  
out in horses that were put into old stables which  
had been badly infected months or years pre-  
viously are explained by the simple fact that some  
of the animals suffered from latent glanders when  
placed in the stable.

In Canada good work has been done by the  
Veterinary Branch at Ottawa; the methods adopt-  
ed for stamping out this disease being up-to-date  
and reasonable.

### Swamp Fever, the Equine Scourge of the Canadian Middle West.

A correspondent asks for information on what  
is, undoubtedly, the scourge of horseflesh in the  
prairie country, namely, swamp fever. This dis-  
ease has been diagnosed in many different sections  
of the country, being first seen in the Red River  
Valley, and as far west as Portage la Prairie.  
It is incurable, and up to date the cause cannot be  
said to have been found. Unfortunately, some  
laymen, and professional men, too, for that  
matter, confuse this disease with typhoid in-  
fluenza, which disease is, in the majority of cases,  
amenable to treatment with satisfactory results.

Swamp fever symptoms may be enumerated as  
follows: The pulse is often out of proportion to  
the temperature, e.g., a pulse of fifty per minute,  
and a temperature of 105° F. In addition, there  
is a peculiar thrill felt just after the regular pulse-  
beat has been felt and the wall of the artery re-  
laxing. The temperature is variable, high for a  
time, then down, later rising again, and towards  
the end it remains high, and when the temperature  
is low one is apt to be deceived as to the disease.  
The appetite may be described as voracious, and  
yet, in spite of good feeding, the horse gets thinner  
and thinner. The mucous membranes of the  
mouth and eyes are extremely pale, an evidence of  
what we may, to make our meaning plain, term  
bloodlessness. The blood in this disease has  
changed. There is extensive destruction of the  
red blood corpuscles (blood consists of a fluid and  
a solid, the latter being made up of red corpuscles  
and white corpuscles, about eight million of the  
former per cubic centimetre, the white running  
into the hundred thousands per c. c.), from what  
cause is not known, but this blood-cell destruction  
is revealed by the paleness of the mucous mem-  
branes above mentioned. Occasionally, an in-  
crease in the urine passed daily is noticed, which  
is an unfavorable symptom, indicative of a break-  
ing up. The sick animal also has a dragging  
gait. So far as the evidence goes, it does not  
seem to be a contagious disease, and it usually  
appears about June, cases increasing in number  
until October. It is held by some that the  
sloughs are the source of infection, and that hay  
from such sloughs is dangerous to use. Some  
veterinarians advise their clients to feed timothy  
hay or oat sheaves in place of the slough fodder,  
and with beneficial effects where their advice was  
followed.

The chances of recovery of affected horses are  
practically nil. Recoveries, when occurring, are  
in horses in which the disease was noticed early,  
and treatment given. For all practical purposes,  
at the present time, we may consider this disease  
as incurable. In any event, eighty to ninety per  
cent. die, and if a veterinarian claims great suc-  
cess from his mode of treatment, with recoveries  
of more than fifteen per cent., we can be reason-  
ably sure that he has made a mistake as to the  
disease he is treating. The post-mortem appear-  
ances are typical of a blood-losing disease: The  
body is very deficient in flesh; the natural fat  
has largely disappeared; the blood is coagulated  
in a yellow jellylike clot, with a small amount of  
red sediment, as it were, formed by red blood  
cells; occasionally, the blood is found more or  
less fluid, and divided into distinct layers, the  
larger portion at the top being a thin, syrupy  
yellow fluid, the other portion of a dirty red  
fluid, which contains the red cells. The milt or  
spleen is much enlarged, the liver unchanged. The  
kidneys, in some cases, show signs of a chronic  
inflammation. The lungs are usually healthy in  
appearance, but the heart is generally enlarged,  
and the cavities filled with clotted material. No  
ulcers are found in the intestines, although the  
probable entrance of the infection is there, if the  
theory of infected hay is tenable. Many drugs  
have been used in this disease, quinine and  
arsenic (Fowler's solution) giving the best results,  
the latter drug during the chronic stages, the  
former during the high-fever periods.

This disease is seen in the Dakotas and Minne-  
sota, and is a severe financial drain on the farm-  
er among whose horses it gets a foothold. As  
many are apt to confuse the two diseases, typhoid  
influenza and swamp fever, we submit the follow-  
ing differences:

### SWAMP FEVER.

Variation in temperature during the disease;  
pulse out of proportion to the temperature.  
Appetite good, often ravenous; no cough.  
Mucous membrane very pale; general appear-  
ance of bloodlessness.