

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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It is impartial and independent of all cliques or parties, handsomely
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will gain much in knowledge, but far more in in-
spiration, in thought-power, and in stimulus to
self-help. Next to church and school, a dollar
and a half expended for good agricultural reading
matter is the choicest investment any farmer can
make. A vast army of Canadian farmers know
and appreciate this truth, but others do not.
Counsel with these. Show them the folly of their
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ing winter evenings the rich intellectual feast that
is always insured by the regular weekly visits of
"The Farmer's Advocate." Before spring they
will count the investment a bargain, and thank
you for the advice. This is a year to read.

HORSES.

THE FARMER'S VETERINARY MEDICINE CHEST

While we consider that, except in simple ail-
ments, it is wise for the farmer to send for his
veterinarian, there are cases in which the services
of such are not available, and many in which they
are not necessary, as many simple ailments and
accidents can be as successfully treated by the
intelligent stock-owner as by the professional man.
As we have in previous articles treated at length
upon the symptoms of many diseases, we will not
in this series take up much space on those points,
but rather mention the drugs, instruments and
fittings that we think should be found in the
stable, and state the cases in which they should
be used. In the first place, the chest or closet
should be of reasonable size, and securely placed
in some position where it is not liable to get
knocked down or broken; and it should be kept
securely locked, in order that children or meddle-
some persons cannot have access, as, while the
majority of drugs we will mention are compara-
tively harmless in reasonable doses, most drugs
are harmful in excessive doses, and a drug in-
tended for external application may be very harm-
ful if taken internally, even in small doses. One
of the most important points to be observed is
to have all bottles and packages plainly labeled
with the common name of the drug, in order to
avoid mistakes, as many drugs are very similar

in appearance, but differ greatly in action and
doses; and, as the farmer is not supposed to be
well posted on the properties of the drugs, he will
not be able to discriminate; hence, if they are not
labeled, he is liable to make serious mistakes. In
fact, many drugs, some comparatively harmless,
and others poisonous in small doses, are so alike
in general appearance, smell, or absence of smell,
etc., that even a druggist is liable to make a mis-
take unless very careful.

The chest should contain a weighing scales that
will weigh correctly from 1 dram to 1 pound, a
glass graduate marked from 1 dram to 4 pounces
to measure liquids, a drenching bottle, a 4-ounce
syringe, a veterinarian's injection pump, a trocar
and canula, a dessert spoon or two, a few veteri-
narian's suture needles of different sizes, silk and
hemp sutures of different sizes, a few yards of
factory cotton or Canton flannel for bandages, a
teat syphon or two, a cattle probang and gag,
and a mortar and pestle.

The drugs should not be kept in large quanti-
ties, as many of them deteriorate with age and
become less active, and this may be the means of
loss, as we always depend upon a certain quantity
of a certain drug administered under certain cir-
cumstances giving certain actions; but if the drug
be of inferior quality, or has become so from
long keeping, it will require a large dose to pro-
duce the action that the ordinary dose should pro-
duce; hence, if we are using the drug, supposing it
is of standard strength, we will be disappointed,
and it may be too late when we discover the cause
of the non-action. Hence, we should purchase the
drugs from a reliable druggist, and in small quan-
tities, in order that we may be able to depend,
with reasonable certainty, upon their action. Of
course, even when the best drugs are used, we often
fail to get the looked-for action, as the action of
drugs is largely modified by disease and other
conditions that we cannot control. If drugs
would produce their physiological actions under
all circumstances, when administered in proper
doses, it would be a very happy condition of
things, and there would be very few fatal cases,
as all that would be necessary would be to make
a correct diagnosis of the case and then administer
the drug that would correct the trouble; but so
many conditions modify the action of medicines,
not only in degree, but often in kind, we often
look in vain for the action we are endeavoring to
produce.

The medicines or drugs that the chest should
contain:

Epsom Salts, 10 lbs.
Gamboge, 1 lb.
Barbadoes Aloes, 1 lb.
Ginger, 1 lb.
Gentian, 1 lb.
Nux Vomica, 1 lb.
Hyposulphite of Soda, 1 lb.
Bicarbonate of Soda, 1 lb.
Nitrate of Potash, 1 lb.
Chlorate of Potash, 1 lb.
Iodide of Potash, 1 lb.
Cantharides, 4 lb.
Binioidide of Mercury, 4 oz.
Sulphate of Iron, 1 lb.
Sulphate of Copper, 1 lb.
Calomel, 1 lb.
Vaseline, 4 lbs.
Catechu, 1 lb.
Boric Acid, 1 lb.
Prepared Chalk, 1 lb.
Chloral Hydrate, 1 lb.
Sulphate of Zinc, 1 lb.
Acetate of Lead, 1 lb.

LIQUIDS:

Raw Linseed Oil, 1 gal.
Oil of Turpentine, 1 qt.
Fluid Extract of Belladonna, 8 oz.
Tincture of Opium, 8 oz.
Sweet Spirits of Nitre, 8 oz.
Liquor Ammonia, 8 oz.
Liquor Ammonia Acetatis, 1 lb.
Carbolic Acid, 8 oz.
Creolin, Zenoleum, or other coal-tar products,
1 lb.
Rectified Spirits, 2 lbs.
Tincture of Arnica, 2 lbs.
Butter of Antimony, 4 oz.
Tincture of Myrrh, 4 oz.

This will make a fairly complete list, and in-
cludes most medicines that are reasonably safe for
the unprofessional man to use. Some are used
externally and others internally only, while some
are used both ways. The internal administration
of liquids in considerable quantities requires care.
The head of the animal must be elevated, probably
the better way being to pass the halter-shank
over a beam or through a ring in the ceiling, and
draw on it until the head is so high that the
mouth is higher than the throat, then the liquid
is poured out of a bottle in small quantities into
the mouth; when the patient swallows, a little
more is poured out of the bottle, etc. If large
quantities are poured into the mouth, and the
animal does not swallow promptly, there is great
danger of some passing down the windpipe and
setting up mechanical bronchitis or causing suffo-

cation. In drenching cattle, the head can be
kept elevated by the operator with his thumb and
finger in the nostrils. The ox will swallow much
faster than the horse, in most cases; at the same
time, care must be taken not to allow the liquid
to run too fast. When small quantities of fluid
are to be given to the horse, it can be done nicely
by injecting well back into the mouth with a 2-
ounce syringe. Powders can be given either in
damp food, in water, or placed well back on the
tongue with a spoon. When the bulk is large, as
with an aloetic purgative, it is often given in the
form of a ball. It requires some practice to
enable a man to give balls readily. In future is-
sues we will mention briefly, in detail, the use of
the instruments and drugs above enumerated.

"WHIP."

WANT AN AMERICAN BREED OF DRAFT HORSES

The Iowa State College, at Ames, is co-operating
with the United States Government in a breeding ex-
periment to establish a breed of gray draft horses. [An
importation of gray Shires and Clydesdales arrived at
Ames about two weeks ago, and they are to be used
as the foundation stock in this work.]

The object of the experiment is to combine and im-
prove the qualities of the highest excellence of each
breed, so far as possible, and to eliminate some of the
characteristics that are objectionable from the Ameri-
can standpoint. It is desired to combine the feet,
quality, pasterns and action of the Clydesdale with the
more massive proportions of the Shire, and, while doing
so, to establish the gray color and other essential char-
acteristics which will eventually lead to the development
of an American breed of draft horses better adapted to
American conditions than any of the foreign breeds.

It is the opinion of the best-informed horsemen that
the crossing of these breeds will not be attended with
the usual uncertain results of cross-breeding experi-
ments, as they have practically the same origin, and
have been bred along quite similar lines for many gen-
erations. Lawrence Drew, the most successful Clydes-
dale breeder of his time, unquestionably made use of
Shire blood in his operations, and the famous sire,
Prince of Wales, is generally conceded to have had a
Shire dam. Moreover, some of the most noted show
geldings seen in American show-rings in recent years
have combined the blood of these two breeds.

In adhering to the gray color, there will be no radi-
cal departure from the original characteristics of these
breeds, as gray has been a common, if not prevailing
color of both breeds, and many of the best specimens
of each breed are still found among the grays. In the
United States gray is the popular draft-horse color, and
other things being equal, a gray gelding commands
more money on the market than one of any other color.

A study of blood lines and draft types decided Sec-
retary Wilson, of the United States Department of Agri-
culture, and Professors Curtiss and Kennedy, of the
Iowa State College, to select the Shire and Clydesdale
breeds for the beginning of the experiment, though
some of the gray Percheron blood may possibly be used
later in the progress of the experiment.

The importation consists of eight animals, one stall-
ion and two mares of the Clydesdale breed, and one
stallion and four mares of the Shire breed. These in-
dividuals are all of outstanding excellence. Professor
W. J. Kennedy selected them from the cream of
European studs, and they are described as an ideal
bunch to start the great experimental breed on the way
to popularity. The three-year-old Dappled Tom, sired
by Stroxtan Tom, a winner of more medals than any
other Shire, is an individual of the ton size, and has
much of the best blood known to the Shire breed. His
dam is Lady Smith 3rd, a mare of wonderful perfec-
tion. She is a full sister to Lady Smith 2nd, a cham-
pion at the Shire Horse Show, of London. Her sire is
Nailstone's Cœur de Lion, a twice-champion of the
Royal Agricultural Show, of England. Dappled Tom
was bought from Thos. Forshaw & Son, the great Shire
breeders, of Carlton-on-the-Trent. The leading Shire
mare is Burford Mettle, a two-year-old weighing over
1,800 pounds, bought from James Gould, at Lymm,
England. She was sired by Lymm Lion, he by Con-
quering Harold. Too much cannot be said in praise of
this filly. She will be shown at the next International.
The other Shire mares are also good animals. Madres-
field Alice and Madresfield Allen are sisters, two and
three years old, respectively. They were bred by Lord
Beauchamp, of Malvern, England. They were sired by
Iron Chancellor, first and champion at 1894, 1895 and
1896 Bath, West England, and Essex Shows. Kirby
Bedon Firefly is a three-year-old, well bred, a good in-
dividual, and a winner at several of the leading shows.
She was purchased from A. H. Clarke, Spalding, Eng-
land.

The Clydesdales are headed by Kuroki, a four-year-
old, sired by Prince Shapely, by Cedric. He is out of
the celebrated Her Ain Sel', of Colonel Holloway's
breeding. Kuroki's dam is by Baron's Pride, and grand-
dam by McGregor. He was bred by A. & W. Mont-
gomery, Castle Douglas, who consider him one of the
very best Clydesdale stallions that have ever left Scot-
land. He combines the best blood and the highest ex-
cellence of the most successful breeders on both sides of
the water.

The two Clydesdale mares are worthy representa-
tives of the breed. Gray Pearl is a five-year-old, pur-
chased from Major Duff, at Drummond Castle, Keith,
Scotland. She was sired by Pearl Oyster, a stallion