



SAND TOOLHOUSE.

Two Plunged That Offer Special

Advantages to Farmers.

There is no trying to keep tools if

you have place to put them. When

they are scattered around barn, wood-

house or outhouse, they soon become

spoiled. It does not require

an expert to do much of the

blacksmithing or carpentering to do many

of the about the farm; hence many

progressive farmers advocate a work-

shop. Accompanying diagram, fur-

nished by Ohio Farmer, illustrates a

roughly a substantial but inexpensive

structure. The man who owns it

says:

We all the building ourselves in a

week of the year; hence we did not

lay out much money on it. It built

itself.

The speed of the team in plowing

varies greatly. The Ohio Farmer says

that horses naturally fast walkers

travel 20 miles a day in the plow with-

out exhibiting any more fatigue than

others that walk naturally only half as

fast and accomplish only half as much.

With a 9 inch furrow a team that walks

14 miles an hour will plow an acre in

7 hours and 30 minutes, while if it walks

24 miles an hour it will finish the acre

in 4 hours and would plow 24 acres in

10 hours. Most of our modern two horse

walking plows are made to cut a 10 inch

furrow, and they will turn 12 inches by

breaking 2 inches, but this adds too

much to the draft, especially in stiff soil.

At the walking contest on the state

fair grounds at Columbus, O., in 1899,

the first prize was pulled half a ton of

coal at the rate of over five miles an hour,

and her owner said she would keep that

gait up all day. This would be imprac-

ticable in the plow, but 3 or 4 miles

would not be impracticable, and the gain

over the 14 mile team is apparent from

above figures.

The time lost in turning is consid-

erable. The advantage of long pulls in this

respect is seen from the following fig-

ures: With a furrow 24 feet long the

time lost in turning is 10 hours' work is

6 hours 11 minutes; furrow 44 feet long,

time lost in turning is 2 hours and 44

minutes; furrow 60 feet, time lost 2

hours and 1 minute; furrow 82 feet,

time lost 1 hour and 28 minutes. The

time lost in turning, however, is not all

lost time, for the team requires some

"let up" from the constant strain that

exists in this work.

Substitute Light Gates For Bars.

The sliding gate depicted in the cut is

especially adapted as a substitute for

bars. A farmer who has replaced the

bars on his farm with gates claims that

he made six gates similar to the one here

depicted, with the aid of a hired man, in

one afternoon, and that 10 years' trial

with them only serves to enhance their

value as a time and labor saving device.

This gate, which was originally illus-

trated in The Farm Journal, is made

of day pine 1 by 5 inches; it is light, and

any boy big enough to drive pigs can

handle it. To open it just slide the gate

back until the ends of the top and bot-

tom rails come out of the top and bot-

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RAPID PLOWING.

Authorities Express Themselves on the

Subject—Some Helpful Statistics.

A good authority on the subject of

plowing says that 24 miles an hour is as

fast as any team ought to walk in the

plow. In clay ground two miles is fast

enough, kept up for 10 hours a day. In

loose, loamy soil, when the object is sim-

ply to stir up the surface, wide furrows

can be taken, the team can move off at

a rapid walk, and a large area can be

plowed over in a day.

A team walking two miles per hour

for 10 hours will plow as follows, ac-

cording to width of furrow: Furrow 5

inches wide, 1 acre; 6 inches, 1.3 acres;

7 inches, 1.6 acres; 8 inches, 2 acres;

9 inches, 2.3 acres; 10 inches, 2.6 acres;

and so on, increasing two-tenths of an acre

for each inch increase in width of fur-

row. With a furrow 7 inches wide a

team must walk 14 miles to plow an

acre. With a furrow 12 inches wide a

team will walk only 8 miles to plow an

acre, and in walking 20 miles would

plow very nearly 24 acres.

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TREES ON THEIR OWN ROOTS.

Fruit From Seedlings—Have Budding and

Grafting a Tendency to Degeneration?

The idea that in order to get good vari-

eties of fruit we must bud or graft

from existing trees that are known to be

such prevails so extensively that no other

system of propagation can be said to be

in general practice. Yet it is true of the

most of fruits that the best as well as

the poorest of the varieties have origi-

nated as seedlings. Not a few of our

fruitgrowers are suspecting that the

practice of budding and grafting has a

tendency to degeneration and is at least

a cause equally potent with climatic

changes and soil exhaustion for loss of

vigor and the want of a power to resist

unfavorable influences, in which case

fruit trees of the olden times were supe-

rior to those of the present.

That grafting or budding on stocks

and roots is the only certain method of

reproducing exactly the variety we wish

to perpetuate is freely admitted, but

may it not also be true that the practice

should become more general of raising

fruit trees from selected seeds? In case

of the peach we may fairly expect trees

from seeds of the best varieties to pos-

sess many of the good qualities of the

parent stock, and if the vigor, produc-

tiveness and freedom from disease of old

time orchards can to any considerable

extent be regained it is certainly worth

trying for.

That we can originate a variety of the

apple which will reproduce itself from

the seeds with the same uniformity as

from its scions is scarcely to be expect-

ed. It seems reasonable, however, to be-

lieve that by planting young trees from

seeds of our best apples short distances

apart in the rows and leaving them to

be tested in future and then cutting out

those least desirable we may secure or-

chards of excellent fruit and at the

same time more prolific and longer lived

than many of the grafted and budded

kinds of the present time.

Autumn Treatment of Raspberries.

The London Garden contains some

good directions on the autumn treat-

ment of the raspberry, the substance of

which is worth repeating, with some

comments. The early removal of the

canes is recommended, which is good

advice when they are standing in

sheltered positions. But in bleak ex-

posed the old canes may aid in pro-

tecting the new ones against wind and

storms. Heavy surface mulching twice

a year is recommended. Suckers should

be removed, because they rot the plants,

but a better way is to clear out all the

needless suckers early in the season

when only a few inches high.

Only three or four canes for future

bearing should be allowed for each stool,

or five at the most if they are rather

weak. If, however, they are wanted for

planting, more may be allowed. Canes

for next season's bearing may be moder-

ately or lightly pruned or shortened

back or pinched into good shape with-

out removing much foliage till they have

acquired a strong and well matured

wood.

A Hardy Italian Shrub.

Viter Agnus-Castus is a very pretty,

low, free flowering, hardy Italian shrub,

which has been known for nearly 300

years, and yet it is seldom seen. Mr.

Lyon says of it that the ends of the

branches die back in severe winters,

but never enough to prevent an abundant

bloom all through the summer and au-

NOVELTIES IN READING.

Dr. Von Holst, the eminent German

historian, who has lately taken up his re-

sidence in this country, will furnish to the

November Forum a slashing criticism of the

Senate filibusters.

The first volume of McClure's Magazine

closes with the November number. Among

the contributors to volume II. will be:

Robert Louis Stevenson, William Dean

Howells, Frank R. Stockton, Rudyard

Kipling, Octave Thanet, Prof. Henry

Drummond, Clark Russell, Conan Doyle

and others.

The complete novel in the November

number of Lippincott's is "An Unsatis-

factory Lover," by Mrs. Hungerford

Duchess. It tells, in the style which has

charmed so many readers, of an inauspicious

wooing and an interrupted courtship, which

at length led to a happy result—for the

lover did not always remain unsatisfactory.

Mrs. Francis Hodgson Burnett has been

induced to revive "Little Lord Fauntleroy"

in a series of articles just completed for

the Ladies' Home Journal, in which she

tells "How Fauntleroy Really Occurred,"

and traces the conception of the story, the

development of the character as he lived

under her own eyes, and describes Faunt-

leroy as he is to-day—her own son.

An old Kirriemuir schoolfellow of Bar-

rie's, by the way, declares that as a boy

the author of "A Window in Thrums"

was a very commonplace little person,

showing forth no evidences of the clever-

ness to come. He once wrote a farce for a

New Year's entertainment at the school,

which so far from awaking admiration

was promptly set upon as "poor stuff."

In fact, he is remembered best as a small

and animated member of the football team.

The Parry for November enters upon a

new year, and announces in that number

many new and important features. In-

stead of the weekly parts forming a

monthly whole, we have the approved

magazine form, lacking none of the bright,

wholesome and charming elements that

characterize this young folks' magazine as

the household standard. It is charmingly

illustrated. 10 cents a number, \$1 a year.

D. Lothrop Company, publishers, Boston.

Miss Mary Wilkins has written a new