

MOLINE PLOWS
AND
FLYING DUTCHMAN
FARM IMPLEMENT.



MOLINE Plow Co.

MOLINE, ILLINOIS.

Branch Houses of

Moline Plow Company,

Moline, Illinois.

KANSAS MOLINE PLOW CO. - Kansas City, Mo.
NEBRASKA MOLINE PLOW CO. - Omaha, Neb.
MINNESOTA MOLINE PLOW CO. - Minneapolis.
TEXAS MOLINE PLOW CO. - Dallas, Texas.
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CALIFORNIA MOLINE PLOW CO. Stockton, Cal.
WESTERN MOLINE PLOW CO. - Ogden, Utah.
CANADIAN MOLINE PLOW CO. Winnipeg, Man.

Call on local dealer, or write the factory or nearest branch house for illustrated descriptive circulars of **MOLINE PLOWS** and other Flying Dutchman Farm Implements.

Riding and Walking Plows.

Tooth and Disc Harrows.

Corn, Cotton and Bean Planters.

Riding and Walking Cultivators.

Disc Cultivators, Stalk Cutters.

Listers and Drills.

Sugar Beet Machinery.

Potato Diggers, Hay Rakes.

**A Sign that Never
Fails.**



This TRADE MARK upon an implement is a sign of superiority and a guarantee that it will fulfill every promise made for it in circulars and other printed matter.

THIS convenient little Memorandum Book is handed to our farmer friends with the hope that it may be of service, and at the same time prove a constant reminder of the superiority of the Flying Dutchman Line of Farming Implements. The first and last four pages are devoted to carefully selected data that will be of interest and value to the up-to-date farmer and stock raiser. Inquiries concerning the Flying Dutchman farm tools will be cheerfully answered by your agent, the nearest branch house, or the factory.

MOLINE PLOW CO.

Cities Having Over 100,000 Population.

Allegheny, Pa.....	129,896
Baltimore, Md.....	508,975
Boston, Mass.....	560,892
Buffalo, N. Y.....	352,387
Chicago, Ill.....	1,698,575
Cincinnati, Ohio.....	325,902
Cleveland, Ohio.....	381,768
Columbus, Ohio.....	125,560
Denver, Col.....	133,859
Detroit, Mich.....	285,704
Fall River, Mass.....	104,863
Indianapolis, Ind.....	169,164
Jersey City, N. J.....	206,433
Kansas City, Mo.....	163,752
Los Angeles, Cal.....	102,479
Louisville, Ky.....	204,731
Memphis, Tenn.....	102,320
Milwaukee, Wis.....	285,315
Minneapolis, Minn.....	202,718
Newark, N. J.....	246,070
New Haven, Conn.....	108,027
New Orleans, La.....	287,104
New York, N. Y.....	3,437,202
Omaha, Neb.....	102,555
Paterson, N. J.....	105,171
Philadelphia, Pa.....	1,293,697
Pittsburg, Pa.....	321,616
Providence, R. I.....	175,597
Rochester, N. Y.....	162,608
San Francisco, Cal.....	342,782
Scranton, Pa.....	102,026
St. Joseph, Mo.....	102,979
St. Louis, Mo.....	575,238
St. Paul, Minn.....	163,065
Syracuse, N. Y.....	108,374
Toledo, Ohio.....	131,822
Washington, D. C.....	278,718
Worcester, Mass.....	118,421

Value of Various Foods for Animals.

FOODS	Amount of flesh- form'g matter in 100 pounds..	Amount of fat- form'g matter in 100 pounds..	Total nutritive matter in 100 pounds.....	Nutritive equiv. of 100 lbs. best English hay..
Irish Potatoes.....	1.4	18.9	20.3	245.3
Carrots	0.6	6.6	7.2	691.6
Parsnips	1.2	7.0	8.2	607.3
Jerusalem Artichoke	1.0	18.8	19.8	251.5
Sugar Beet	0.9	13.6	14.5	336.5
Turnips (Swede).....	1.0	5.2	6.2	803.2
Common White Turnip..	0.9	3.3	4.2	1185.7
Mangel Wurtzel	1.0	12.6	13.6	367.6
Green Pea Straw	0.9	7.9	8.8	565.9
Spurrey, green.....	2.7	2.3	5.0	960.0
Green Buckwheat Stalks	0.2	4.7	4.9	1016.6
Common Vetch, green...	1.9	2.6	4.5	1106.6
French Vetch, green....	0.7	4.7	5.4	922.2
Gr. Stalks White Lupin..	1.8	2.3	4.1	1212.1
Green Stalks White Bean	1.0	2.7	3.7	1345.9
Green Oats, fodder.....	1.0	8.5	9.5	524.2
Timothy Grass, green....	4.0	9.7	13.7	363.4
Red Top Grass, green....	3.3	8.7	12.0	415.0
Superior English Hay....	13.5	36.3	49.8	100.0
Red Clover, green.....	2.0	3.6	5.6	907.1
White Clover, green	1.5	2.7	4.2	1185.7
Lucerne, green.....	1.9	3.6	5.5	905.4
Red Clover, hay	22.5	18.7	41.2	120.8
White Clover, hay.....	18.7	40.0	58.7	84.6
Lucerne, hay.....	12.7	38.0	50.7	98.2
Wheat Flour	14.7	66.4	81.1	61.4
Indian Corn.....	11.0	66.7	77.7	64.2
Rye Meal	14.3	55.8	70.1	71.2
Barley Meal	13.0	52.0	65.0	76.0
Oat Meal.....	18.0	51.1	69.1	72.0
Buckwheat Meal.....	9.0	52.1	61.1	81.5
Peas	23.1	41.9	65.0	76.0
Kidney Beans	23.9	39.3	63.2	78.7
White Field Beans.....	24.0	39.7	63.7	78.2
Lentils.....	25.7	38.9	64.6	77.0
English Linseed Cake	22.1	51.0	73.1	68.0
American Linseed Cake..	22.2	48.6	70.8	70.3

THE PARALYZER PULVERIZER is one of the most useful agricultural implements manufactured. Harrow, clod-crusher and leveler in one simple machine, and all done in one operation.

THE MOLINE PLOW Co. builds implements to meet the requirements of all soils.

How Deep In the Ground to Plant Corn.

The following is the result of an experiment with Indian Corn. That which was planted at the depth of

$\frac{3}{8}$ inch, sprout appeared in.....	8 days
1 inch, sprout appeared in.....	8 $\frac{1}{2}$ days
1 $\frac{1}{2}$ inch, sprout appeared in.....	9 $\frac{1}{2}$ days
2 inches, sprout appeared in.....	10 days
2 $\frac{1}{2}$ inches, sprout appeared in.....	11 $\frac{1}{2}$ days
3 inches, sprout appeared in.....	12 days
3 $\frac{1}{2}$ inches, sprout appeared in.....	13 days
4 inches, sprout appeared in.....	13 $\frac{1}{2}$ days

The more shallow the seed was covered with earth, the more rapidly the sprout made its appearance, and the stronger afterwards was the stock. The deeper the seed lay, the longer it remained before it came to the surface.

THE DUTCH UNCLE Riding Cultivator is the favorite in the corn belt.

Number of Shrubs or Plants for an Acre of Ground.

Distance Apart	No. of Plants	Distance Apart	No. of Plants.
3 x3 inches	696,960	6 x 6 feet	1,210
4 x4 "	392,040	6 $\frac{1}{2}$ x 6 $\frac{1}{2}$ "	1,031
6 x6 "	174,240	7 x 7 "	881
9 x9 "	77,440	8 x 8 "	680
1 x1 foot	43,560	9 x 9 "	517
1 $\frac{1}{2}$ x1 $\frac{1}{2}$ feet	19,360	10 x10 "	435
2 x1 "	21,780	11 x11 "	360
2 x2 "	10,890	12 x12 "	302
2 $\frac{1}{2}$ x2 $\frac{1}{2}$ "	6,960	13 x13 "	257
3 x1 foot	14,520	14 x14 "	222
3 x2 feet	7,260	15 x15 "	193
3 x3 "	4,840	16 x16 "	170
3 $\frac{1}{2}$ x3 $\frac{1}{2}$ "	3,555	16 $\frac{1}{2}$ x16 $\frac{1}{2}$ "	160
4 x1 "	10,890	17 x17 "	150
4 x2 "	5,445	18 x18 "	134
4 x3 "	3,630	19 x19 "	120
4 x4 "	2,722	20 x20 "	108
4 $\frac{1}{2}$ x4 $\frac{1}{2}$ "	2,151	25 x25 "	69
5 x1 "	8,712	30 x30 "	48
5 x2 "	4,356	33 x33 "	40
5 x3 "	2,904	40 x40 "	27
5 x4 "	2,178	50 x50 "	17
5 x5 "	1,742	60 x60 "	12
5 $\frac{1}{2}$ x5 $\frac{1}{2}$ "	1,417	66 x66 "	20

THE BESTYET Surface Cultivator has the finest adjustment known for the blades. This feature is covered by patent, and will be found on no other implement.

Comparative Yield of Various Vegetables.
Production in Pounds Weight per Acre.

VEGETABLES	LBS ACRE	VEGETABLES	LBS ACRE
Hops	442	Grass	7,000
Wheat	1,260	Carrots	6,800
Barley	1,600	Potatoes	7,500
Oats	1,840	Apples	8,000
Peas	1,920	Turnips	8,420
Beans	2,000	Cinque-foil grass	9,600
Plums	2,000	Vetches, green	9,800
Cherries	2,000	Cabbages	10,900
Onions	2,800	Parsnips	11,200
Hay	4,000	Mangel Wurtzel	22,000
Pears	5,000		

One acre will produce 224 lbs. mutton, 186 lbs. beef, 2,900 lbs. milk, 300 lbs. butter, and 200 lbs. cheese. A fair crop of potatoes from 16 bushels of seed is 340 bushels.

Experiment and Theory.

Table showing the difference between good hay and the substances noted below, as food for stock.

100 lbs. Hay are equal to	100 lbs. Hay are equal to
275 lbs. Green Indi'n Co'n	46 lbs. Wheat
442 lbs. Rye Straw	59 lbs. Oats
360 lbs. Wheat Straw	45 lbs. Peas and Beans,
164 lbs. Oat Straw	mixed
180 lbs. Barley Straw	64 lbs. Buckwheat
153 lbs. Pea Straw	57 lbs. Indian Corn
200 lbs. Buckwhe't Str'w	68 lbs. Acorns
201 lbs. Raw Potatoes	105 lbs. Wheat Bran
175 lbs. Boiled Potatoes	109 lbs. Rye Bran
339 lbs. Mangel Wurtzel	167 lbs. Wheat, Pea and
504 lbs. Turnips	Oat Chaff
300 lbs. Carrots	179 lbs. Rye and Barley,
54 lbs. Rye	mixed

This table shows the amount of hay or its equivalent per day, required by each 100 pounds of live weight of various animals.

Working Horses	3.08 lbs
Working Oxen	2.40 lbs
Fatting Oxen	5.00 lbs
Fatting Oxen, when fat	4.00 lbs
Milch Cows	from 2 25 to 2 40 lbs
Dry Cows	2.42 lbs
Young growing cattle	3 08 lbs
Steers	2.84 lbs
Pigs	3.00 lbs
Sheep	3.00 lbs

MOLINE STEEL PIPE AND U-BAR harrows have a wide reputation for strength, durability, ease of handling and adaptability for various kinds of work.

Capacity of Boxes.

The following table will often be found convenient, taking **INSIDE** dimensions:

A box 8 2-5 inches by 8 inches, and 8 inches deep, will contain **A PECK**.

A box 8 in. square and 4½ in. deep, will contain **A GALLON**.

A box 7 in. square and 2¾ in. deep, will contain **A HALF GALLON**.

A box 4 in. square and 4 1-5 in. deep, will contain **A QUART**.

A box 3 in. square and 3½ in. deep, will contain **A PINT**.

A box 24 in. by 17 in., and 28 inches deep, will contain **A BARREL**.

How to Measure Corn in Crib, Hay in Mow, etc.

This rule will apply to a crib of any kind. Two cubic feet of sound, dry corn in the ear will make a bushel shelled. To get the quantity of shelled corn in a crib of corn in the ear, measure the length, breadth and height of the crib inside of the rail; multiply the length by the breadth and the product by the height; then divide the product by two, and you have the number of bushels in the crib.

To find the number of bushels of apples, potatoes, etc., in a bin, multiply the length, breadth and thickness together, and this product by 8, and point off one figure in the product for decimals.

To find the amount of hay in a mow, allow 512 cubic feet for a ton, and it will come out very near correct.

How to Preserve Eggs.

To each pailful of water, add two pints of fresh slacked lime and one pint of common salt; mix well. Fill your barrel half full with this fluid, put your eggs down in it any time after June, and they will keep two years if desired.

Relative Value of Different Food for Stock.

100 pounds of good hay for stock are equal to

Articles	Pounds	Articles	Pounds
Beans.....	28	Oats.....	59
Beets.....	669	Oil-cake, linseed.....	43
Clover, red, green.....	373	Peas, dry.....	37½
Carrots.....	371	Potatoes.....	350
Corn.....	62	Rye Straw.....	429
Clover, red, dry.....	88	Rye.....	53½
Lucerne.....	89	Turnips.....	469
Mangolds.....	368½	Wheat.....	44½
Oat Straw.....	317		

FOR cultivating in crooked rows of corn the **CORN DODGER** Cultivator dodges no comparison with any implement in existence.

Contents of Fields and Lots.

The following table will assist farmers in making an accurate estimate of the amount of land in different fields under cultivation:

10 rods x 16 rods—1 acre	100 ft. x 108 ⁹ / ₁₀ ft.— $\frac{1}{4}$ acre
8 " x 20 " —1 "	25 " x 100 ft—.0574 "
5 " x 32 " —1 "	25 " x 110 ft—.0631 "
4 " x 40 " —1 "	25 " x 120 ft—.0688 "
5 yds. x 968 " —1 "	25 " x 125 ft—.0717 "
10 " x 484 yds. —1 "	25 " x 150 ft—.109 "
20 " x 242 " —1 "	2178 sq. feet —.05 "
40 " x 121 " —1 "	4356 " " —.10 "
80 " x 60 $\frac{1}{2}$ " —1 "	6534 " " —.15 "
70 " x 69 $\frac{1}{2}$ " —1 "	8712 " " —.20 "
220 feet x 198 feet—1 "	10899 " " —.25 "
440 " x 99 " —1 "	13068 " " —.30 "
110 " x 369 " —1 "	15246 " " —.35 "
60 " x 726 " —1 "	17424 " " —.40 "
120 " x 363 " —1 "	19603 " " —.45 "
240 " x 181 $\frac{1}{2}$ " —1 "	21780 " " —.50 "
200 " x 108 ⁹ / ₁₀ " — $\frac{1}{2}$ "	32670 " " —.75 "
100 " x 145 ² / ₁₀ " — $\frac{1}{3}$ "	34848 " " —.80 "

Weights of Various Breeds of Poultry.

	lbs. oz.		lbs. oz.
Black Polish cock		Cochin-China cock	
3 years old.....	5 3	16 months old,	
Black Polish hen 3		moulting.....	6 5
years old.....	3 4	Cochin-China hen.	4 6
Golden Polish cock	5 0	Malay cock, 16 mo.	
Golden Polish hen	3 8	old.....	6 14
Silvr. Hambrghen	3 1	Malay hen, 16 mos.	
Silver Polish hen.	3 4	old.....	4 8
Game cock.....	4 10	Blk Spanish cock	
Game hen.....	3 0	4 months old.....	2 11
Pheasant Malay		Blk Spanish pullet	2 11
cock, 2 years old	7 0	Turkey (cock), 16	
Pheasnt Malay hn.	5 1	months old.....	16 0
Pheasnt M'lay pul-		Turkey (hen), 3 to	
let, 17 months old	5 3	4 years old.....	8 6
Dorking cocks....	7 0	White China gan-	
Dorking hen.....	6 8	der, 6 years old.	12 13
		White China goose	11 13

Number and Length of Common Nails to a Pound.

Size.....	3d.	4d.	6d.	8d.	10d.	12d.
Length.....	1 $\frac{1}{4}$,	1 $\frac{1}{2}$,	2,	2 $\frac{1}{2}$,	3,	3 $\frac{1}{4}$.
No.....	500,	300,	168,	90,	60,	48.
Size.....	16d.	20d.	30d.	40d.	50d.	60d.
Length.....	3 $\frac{1}{2}$,	4,	4 $\frac{1}{2}$,	5,	5 $\frac{1}{2}$,	6.
No.....	36,	24,	18,	13,	10,	8.

THE beet raiser should investigate the **FLYING DUTCHMAN** line of sugar beet machinery

To Compute the Weight of Live Cattle.

For cattle of a girth of from 5 to 7 ft., allow 23 lbs. to the superficial foot. For a girth of from 7 to 9 ft., allow 31 lbs. to the superficial foot. For small cattle and calves of a girth from 3 to 6 feet allow 16 lbs., to the cubic ft. For pigs, sheep and animals measuring less than 3 ft. girth, allow 11 lbs. to the superficial foot.

The following is compiled from two works on the subject:

GIRTH		LENGTH		RENTON'S TABLE	CARY'S TABLE
ft.	in.	ft.	in.	lbs.	lbs.
5	0	3	6	294	294
5	0	4	0	324	324
5	6	3	9	378	378
5	6	4	0	380	383
6	0	4	6	430	433
6	0	5	0	603	602
6	6	4	6	639	637
6	6	4	9	672	672
7	0	5	6	902	903
7	0	6	0	985	983
8	0	6	6	1,394	1,398
8	0	7	0	1,503	1,504

RULE. - Measure the girth in inches back of the shoulder and the length in inches from the square of the buttock to a point even with the point of the shoulder blade. Multiply the girth by the length, and divide the product by 144 for the superficial feet, and then multiply the superficial feet by

the number of lbs. allowed as above for cattle of various girths, and the product will be the number of pounds of beef, veal or pork in the four quarters of the animal.

How to Kill Grease Spots Before Painting.

Wash over smoky or greasy parts with saltpeter or very thin lime white-wash. If soap-suds are used, they must be washed off thoroughly, as they prevent the paint from drying hard.

Amount of Butter and Cheese Obtainable from Milk

100 lbs. milk contains about	3	lbs., pure butter.
100 " " " "	7.8	" cheese.
100 " " averages	3.5	" common butter
100 " " " "	11.7	" common cheese
100 " skim milk yields	13.5	" skim milk "

The time required for the full amount of cream to rise to the surface of new milk at different temperatures may be seen from the following table:

10 to 12 hours,	if temperature of the air is	77° Fahr.
18 to 20	"	" 68° "
24	"	" 55° "
36	"	" 50° "

THE FLYING DUTCHMAN CORN PLANTERS plant corn right. Right number in every hill, and every hill in the right place.

Number of Feet and Rods Traveled

To plant an acre with planters set at various widths:

WIDTH OF PLANTERS.	DISTANCE OF TRAVEL	DISTANCE OF TRAVEL
28 inches	9,281 feet	562 rods
30 inches	8,661 feet	525 rods
32 inches	8,440 feet	493 rods
34 inches	7,722 feet	468 rods
36 inches	7,304 feet	443 rods
38 inches	6,887 feet	417 rods
40 inches	6,574 feet	398 rods
42 inches	6,261 feet	379 rods
44 inches	5,948 feet	360 rods
46 inches	5,635 feet	341 rods
48 inches	5,426 feet	328 rods
60 inches	4,382 feet	265 rods

Number of Trees on an Acre.

Various distances apart each way.

At 4 feet apart... 2,720	At 15 feet apart... 200
At 5 feet apart... 1,749	At 18 feet apart... 135
At 6 feet apart... 1,200	At 20 feet apart... 110
At 8 feet apart... 689	At 22 feet apart... 70
At 10 feet apart... 430	At 30 feet apart... 50
At 12 feet apart... 325	

The New Good Enough Sulky Plow.

With New
Landing Lever
And Swinging
Clevis....



Strong Spring Lift. The Simplest, Lightest Draft
and Strongest Sulky Plow made.

... The Best Plow on Earth for the Money. ...

Bismarck Sulky Plow.



THE BISMARCK is a new sulky plow lately put upon the market. In design it is unlike other sulky plows. It is built upon entirely new lines and has sprung at once into favor wherever introduced. IT IS THE LIGHTEST DRAFT PLOW OF ITS CAPACITY THAT RUNS ON WHEELS. One firm sending in a second order says: "Are pleased to report that the Bismarcks have all been sold and are giving splendid satisfaction. We think we shall soon see people riding to church on Bismarcks. Walking plows bid fair to go out of business, being retired by the efficient and easy running Bismarck. Ask your dealer to show you a Bismarck."

Gretchen

Combined
Corn Planter



Simple, Strong, Accurate. Hill Drop and Drill Drop.

The Cheapest and Best combined planter
on the market to-day.

Factory at Moline, Illinois.

