

# FARMING.

## Trials of Winter Wheat.

Bulletin LXVII, of the Ontario Agricultural College on winter wheat experiments, prepared by Mr. Thomas Shaw, professor of agriculture, and Mr. C. A. Zavitz, assistant superintendent of experiments, is timely, and will be useful to farmers preparing to put in their fall wheat. The important points of the bulletin are here.

The winter wheat crop will always be one of considerable importance to Ontario, notwithstanding the facilities for growing it in Manitoba and the Northwest. This view is supported by the following and other reasons: A large portion of the Province is well adapted to the growth of wheat. That winter wheat may still be grown in Western Ontario in as fine a form as in any country in the world has been amply demonstrated by the yields of the present year. The winter wheat crop may with much advantage be made to form a prominent feature of a regular rotation. It furnishes a crop suitable for sowing grasses along with it, a fact of no little significance in view of the probable decrease in the acreage of barley. It also admits of the autumn sowing of timothy which generally ensures a catch of the seed in any season. The growth of winter wheat tends to a more even distribution of labor throughout the year. It encourages the manufacture of flour in the country, and this furnishes a plentiful supply of bran, which is almost indispensable for certain feeding purposes.

Our farmers should therefore continue to give careful attention to the growth of winter wheat in the parts of the Province favorable to the same. The aim should be not so much to grow a large acreage as to adopt such methods of cultivation and to secure such varieties as are likely to give a large yield per acre. With this end in view the importance of good drainage, sowing at the right time and suitable conditions of soil in relation to rotation, fertility and natural adaptability cannot easily be over-estimated. All things considered, it would be better not to sow winter wheat at all than to sow it under conditions not likely to produce a good crop.

### SELECTION OF VARIETIES.

In selecting varieties to sow, a careful regard must also be given to the wants of the millers. Those good yielding varieties only should be grown which are well adapted to milling purposes. Some years ago quantity was the great consideration with the grower. At present quality is at least equally important with quantity. This statement finds ample confirmation in the low price paid for the wild goose wheat notwithstanding its ample yields. The choice of the millers is not a mere arbitrary one. As in this fastidious age the tastes of the consumer rule, the miller must cater to those tastes or he will lose his custom. The consumer demands a beautifully appearing snowy-white bread and the miller must furnish flour that will produce it. In this we find one of the principal reasons for his preference for white wheats. The baker wants a strong flour, that is, one rich in gluten, and the miller must give it to him or he will cease to buy. Because of this the Manitoba Fyfe spring wheat stands high in favor with the millers. A heavy weighing wheat gives a larger percentage of flour than a light weighing one, hence the preference of the millers for the varieties which weigh the heaviest. The farmers therefore will do well to give diligent heed to the recommendation of the millers as to the varieties which stand high in favor with them, and in making their selections for sowing they should choose accordingly.

There were in all some 70 plots of winter wheat grown at Guelph Experiment Station during the present year. Of the 51 varieties 24 were Canadian and American, and 27 were foreign. The foreign varieties came chiefly from Germany, England, France and Russia. As none of the foreign varieties have as yet proved equal to some of the Canadian and American kinds we do not feel justified at present in recommending them to be sown. This bulletin, therefore, gives the particulars relating to 23 Canadian and American varieties grown under exactly the same conditions.

The following classification is based upon the recognition of all winter wheats as belonging to the bald or bearded varieties. But observe that those varieties with very short beards, often found only on the upper portion of the head, are classified as bald. The wheats in each of these general divisions are again classified according to the color of the grain. It should be borne in mind that sometimes we have white chaff with red wheat and red chaff with white wheat. The finer distinctions of shade in color, as amber, bronze, etc., are not given in this classification, as they are liable to vary with a change of soil and climate. The number standing before the name of each variety gives the order of the yield of the said variety:—

### BALD-HEAD—WHITE CHAFF.

- | White grain.                   | Red grain.               |
|--------------------------------|--------------------------|
| (2) Garfield or Natural Cross. | (1) American Bronze.     |
| (3) Surprise                   | (9) Red Velvet Chaff.    |
| (4) Canadian Velvet Chaff.     | (10) Jones' Winter Fyfe. |
| (5) Bonnell or Landreth.       | (12) Rogers.             |
| (11) Winter Pearl.             | (19) Golden Drop.        |
| (14) Martin Amber.             | (23) New Monarch.        |

### BALD-HEAD—RED CHAFF.

- | White grain.           | Red grain.             |
|------------------------|------------------------|
| (6) Seneca or Clawson. | (8) Early Red Clawson. |
| (7) Standard.          | (16) Manchester.       |

### BEARDED-HEAD—WHITE CHAFF.

- | White grain.    | Red grain.     |
|-----------------|----------------|
| (17) Bulgarian. | (13) Egyptian. |
| (22) Democrat.  |                |

### BEARDED-HEAD—RED CHAFF.

- | White grain.                    | Red grain. |
|---------------------------------|------------|
| (15) Golden cross or Volunteer. |            |
| (18) Red Lyon.                  |            |
| (20) Hybrid Mediterranean.      |            |
| (21) Lancaster.                 |            |

All the varieties of winter wheat, both native and foreign, were grown in plots side by side in the same range. These plots contain exactly the one-fiftieth of an acre each. The aspect of the land is northerly, but the slope is very gentle. The soil may be termed a clay loam with good natural drainage. The soil was prepared on the bare-fallow system, as it was felt that a test of this nature should be made under the most favorable conditions attainable, to bring out to the fullest extent the capabilities of the grains grown. This is the only bare fallow that he had on the farm.

The ground was ploughed twice the previous summer. Additional surface cultivation was also given. Farmyard manure was applied at the rate of fifteen tons to the acre.

The seed was sown by hand. The plots were all sown September 4th with the exception of the winter pearl variety, which was sown on September 8th. The same amount of seed by weight was sown upon each plot, and it was sown at the rate of 1½ bushels per acre. As the location was favorable, the soil well prepared, the weather favorable from time of sowing until time of reaping and especially so during the ripening period, as there was no rust or blight to interfere with the filling of the grain, and as all the conditions were exactly similar and favorable to the most complete development, we may safely conclude that a more favorable opportunity for testing the full capabilities of those wheats when at their best could not easily have been furnished.

The average yield of grain per acre in bushels, allowing 60 pounds to the bushel, was as follows:—American bronze, 65.2; Garfield or natural cross, 64.4; surprise, 63.8; Canadian velvet chaff, 59.9; Bonnell or Landreth, 59.5; Seneca or Clawson, 58.9; standard, 58.3; early red Clawson, 58.3; red velvet chaff, 56.9; Jones' winter Fyfe, 56.3; winter pearl, 55.5; Rogers, 54.6; Egyptian, 53.4; Martin amber, 50.4; golden cross or volunteer, 49.9; Manchester 47.7; Bulgarian: 46.3; red Lyon, 44.5; golden drop, 44.3; hybrid Mediterranean, 44.0; Lancaster, 42.8; Democrat, 41.6; new monarch, 40.8.

It will be noticed that the 23 varieties of wheat mentioned have given most extraordinary yields, and produced wheat of an uncommonly good quality. The highest yield is from the American bronze, which produced at the rate of 65.2 bushels per acre, and the lowest is from the new monarch, which produced at the rate of 40.8 bushels per acre. The average yield of the 23 varieties is at the rate of 52.93 bushels per acre. The highest weight per bushel was 64½ lbs., reached by several of the varieties; the lowest weight was 61 lbs. per bushel, and the average weight of the 23 varieties was 63.28 lbs per bushel. The weight of the straw averaged 1.95 tons per acre. In view of the extraordinary yields thus obtained, and the even more extraordinary weights of the grain, the curiosity is not unnatural which would desire to know whether these yields have a parallel on the continent of America.

It may be well to remark that yields such as the above would not have been obtained from whole fields of these respective varieties, nor could they be looked for from cultivation given under average conditions. Small plots yield more relatively than large ones, owing to cultivation around the borders and probably to other causes, and from this extra yield it has been thought that if one-fifth were deducted the result would be a fair average to expect from a whole field under like conditions in other respects.

There were only four days of difference in the ripening of the 23 varieties. The greatest difference in the average length of the plant in the plots was only 7 inches, and the average length of the plant in all the plots was 38.4 inches. The average length of head was 2.9 inches and the average number of grains per head was 30.1.

### CONCLUSIONS.

The results of the experiments may be thus summarized:

- (1) The splendid returns obtained in this experiment prove that the capabilities of Ontario, as a wheat producing country, are still of a high order.
- (2) The bald wheats have on an average given 9.86 bushels more per acre, or 21.42 per cent. than the bearded varieties, but the latter have weighed on an average 1.37 lb. more per bushel.
- (3) The white wheats have given an average of 5.18 bushels more per acre than the red wheats, and they also stand higher in the estimation of the millers than the latter.
- (4) The bald white chaff white wheats gave an average of 13.6 bushels per acre more than the bearded red wheats.
- (5) The seven leading varieties in point of yield were all white wheats except the American bronze.
- (6) These experiments tend to confirm the popular opinion that white wheats under favorable condition will give more bountiful returns than red wheats, and that the same may be said of the bald varieties as contrasted with the bearded.
- (7) The four best-yielding white wheats for 1891 were the Garfield, surprise, Canadian, velvet chaff and Bonnell; and the four best-yielding varieties of red wheat were the American bronze, early red Clawson, red velvet chaff and Jones' winter Fyfe, in the order named in both instances.
- (8) The four best weighing varieties were the Manchester Bulgarian, Lancaster and Democrat, each of which gave 64½ lbs. per bushel.
- (9) The three velvet chaff varieties gave an average yield of 4.77 bushels per acre in excess of the mean average of the 23 varieties, and weighed 22 lbs. more per bushel, and they are also included in the leading varieties mentioned in conclusion 7.
- (10) Of the varieties enumerated in this bulletin the Dominion Millers' Association recommend the following as the most serviceable for milling purpose, viz., of the white wheats, the surprise, Canadian, velvet chaff and Bulgarian; and of the red wheats, the Jones' winter Fyfe, the hybrid Mediterranean and the longberry red.

### Manuring for Wheat.

One of the advantages in using commercial fertilizers with wheat is that they can be readily applied and worked into the soil near the surface. They can be sown broadcast either before or after the seeding is done, as when the drill is used with the fertilizing attachment it can all be done at one time. Commercial fertilizers, if of a good quality, are readily soluble and hence are available for use by the growing plants. When fresh, coarse stable manure is applied, only a small proportion is available at once for the use of the plants. It must rot and become soluble before it is in a condition to be used, so that when immediate results are desired commercial manures will give the quickest returns.

When animal manure is thoroughly rotted and fined and care is taken to incorporate thoroughly with the soil, not only better but more immediate results will be secured than if applied fresh.

A good way of applying animal manure is by plowing the ground thoroughly in good season, and then by applying broadcast over

the surface, taking care to scatter as evenly as possible.

Ordinarily the work of preparing the soil in a suitable condition for the seed will work it sufficiently into the surface. Wheat requires a considerable amount of nitrogen, and, as a rule, any fertilizer that contains a good per cent. of this essential element of plant food can be applied with benefit to wheat.

Salt is used to a considerable extent with wheat, but this is not in itself a fertilizer, but when applied and worked into the soil it has the effect of making available plant food already in it. In almost any soil in which seed will germinate and make a start to grow there is always more or less plant food that is latent and which needs some action in order to become available, and applying salt aids materially in this process and for this reason can in many cases be applied with benefit.

N. J. S.

### Born to Be a Lawyer.

What is the chief characteristic of a "born lawyer?" Some people fancy that it is audacity; but audacity has, perhaps, spoiled a lawyer's success as often as it has made it. Craftiness, another quality often attributed to lawyers as a class, is as likely to get them into trouble as it is to win them cases. The real master-quality of a good lawyer, according to many modern authorities, is a "genius for details"—an ability to see through a case to the uttermost particular, and keep everything in mind, ready for use at the right moment. The following story has probably been told by more than one lawyer to illustrate this fact:

A lawyer advertised for a clerk. The next morning his office was crowded with applicants—all bright, and many suitable.

He bade them wait until all should arrive, and then ranged them in a row and said he would tell them a story, note their comments, and so judge whom he would choose.

"A certain farmer," began the lawyer, "was troubled with a red squirrel that got in through a hole in his barn and stole his seed-corn. He resolved to kill the squirrel at the first opportunity.

"Seeing him go in at the hole one noon, he took his shot-gun and fired away. The first shot set the barn on fire."

"Did the barn burn?" said one of the boys.

The lawyer, without answer, continued, "And, seeing the barn on fire, the farmer seized a pail of water and ran to put it out."

"Did he put it out?" said another.

"As he passed inside the door shut to and the barn was soon in flames. When the hired girl rushed out with more water—"

"Did they all burn up?" said another boy.

The lawyer went on without answer, "Then the old lady came out, and all was noise and confusion, and everybody was trying to put out the fire."

"Did any one burn up?" said another.

The lawyer said, "There, that will do; you have all shown great interest in the story."

But observing one little bright-eyed fellow in deep silence, he said, "Now, my little man, what have you to say?"

The little fellow blushed, grew uneasy, and stammered out, "I want to know what became of that squirrel; that's what I want to know."

"You'll do," said the lawyer; "you are my man. You have not been switched off by a confusion and a barn burning, and the hired girls and waterpails. You have kept your eye on the squirrel."

### Treatment of Watches.

That a watch may keep good time, says Chamber's Journal, it should be carefully treated; it should be wound at the same time daily, and when not worn should be placed in the same position, always hung up, or always laid down, as every watch goes differently in different positions.

In watches having a double case, the outer one should never be left open. If it is left open even for one night, the glass is covered with a thin film of dust, which will gradually enter the works through even the tiniest openings in the case.

Watches should be wound in the morning, because a spring fully wound up will more readily overcome the disturbances produced by the movements of the wearer. Springs will not break so easily if watches are carefully wound up and not taken out of a warm pocket and placed directly against a cold wall or on a marble slab; for that reason a protective mat is desirable.

The changes of the oil, the variations in temperature, the density and humidity of the air, all greatly affect the going of a watch, and it is only the lever watch of the most perfect finish which almost neutralizes those adverse influences. No watch keeps perfectly correct time. Even the best chronometers, used in observatories and on board ships, must be regulated according to tables which fix the variations to which watches are subject.

A watch should be cleaned every two or three years. In time the oil decomposes, gets mixed with the particles of dust which enter the works of even the best-closing watch, begins to act as a grinding material, and wears out the working parts. It frequently happens that a watch requires cleaning oftener than once in two years, especially if it closes badly or is exposed to much dust and dirt.

Any one who has the misfortune to drop his watch into water should take it at once to the watch-maker, to have it taken to pieces and cleaned; a delay of even an hour may spoil the watch forever.

### Life Would Be merrier

If love were not blind.  
If we were all satisfied.  
If envy were unknown.  
If creed did not foster faction.  
If cooks were more numerous.  
If liars never got out of order.  
If worth were put above wealth.  
If duty were worshiped like beauty.  
If womankind was not so fickle.  
If politics conferred honors instead of spoils.  
If there were more laughing and less sighing.  
If dyspepsia had been omitted from the list of ills.  
If babies slept quietly until the walking and talking period.  
If thieves could be convinced that they will surely be found out.

"Do you believe in fate, Pat?" "Sure and what would we stand on without 'em?"

### FOREIGN NAVAL NOTES.

The naval manoeuvres of the British fleet have been productive of an unusual number of accidents to machinery. On the way from Plymouth to Berehaven the Swiftsure delayed the squadron for nearly an hour by a mishap to her engines. The Speedwell burst one of her steam pipes, but, fortunately, without causing any injury to any of her men. The Tartar broke the eccentric rod of her starboard low-pressure cylinder, and had to drop out for repairs. The condensing apparatus of both the Latona and Pallas gave out, and they had to put into Tynemouth for a supply of fresh water. The Spider had to return to port, after being pronounced in all respects ready for sea, in order to make good several defects of her engines. The firebars of one of the furnaces of the Sharpshooter were completely burned through, and these had to be replaced. The Spanker, of the second class, came to utter grief. Not only did she smash one of her piston rings, but one of her boilers was in such a bad condition that the vessel was practically disabled.

The members of the press rose in their might against the order that they should not be permitted on board certain ships for the manoeuvres, "because their movements will be of no interest to the general public." They were excluded from the other ships on the ground that there was no room for accommodation—which was not the fact. This order was issued by Lord George Hamilton, a surprising fact, since the First Lord of the Admiralty has been looked upon as more anxious and willing to do his duty by the Navy than almost any other member. It is the general impression that the real reason why the Admiralty fought shy this year of wholesome publicity was because it dreaded the discovery that the so-called "20-knot torpedo catchers" are only capable of a sea-speed of 16 knots, and frequently break down at that. The only one of the Sharpshooter class that has been trustworthy from the first is Rattlesnake. Is it due to the fact that the builders were fined \$5,000 because they added sufficient weight to her machinery to make her trustworthy?

"No blame is attached to anybody concerned," is the decision in the case of the bursting of the 6-inch gun on the cruiser Cordelia. As this proves that the bursting of the gun was in no way due to carelessness on the part of the gun's crew, it is evident that the weapon itself must have been defective, and consequently the cause of the weakness ought easily to be traced.

The Royal Adelaide, which was built at Davenport nearly sixty years ago, and which has never yet been outside the breakwater which protects Plymouth Sound, is about to make her first voyage. She is under orders to proceed to Sheerness, where she is to be converted into a training ship.

If one has any desire to note the advance made in every direction in the construction and armament of war vessels, the Royal Naval Exhibition affords the opportunity. The full-size model of the Victoria, the vessel historically associated with Nelson's victories, is a strong contrast with the Victoria. The former was a three-decker of 3,500 tons, 186 feet in length, and carrying an armament of 102 guns, the largest of which were 42 pounders. But she had a complement of 900 men, against 587 for the Victoria. The latter has a length of 540 feet and a displacement of 10,500 tons. She carries an armament of 44 guns, the largest of which are the 110-ton guns. The largest charge of powder used on the Victoria was 10 pounds, while the largest charge used on the Victoria is 1,000 pounds. The Victoria is also a steel vessel, and it has a total of 88 engines.

In point of speed, as well as in general efficiency, the 3,150 ton cruiser 25th de Mayo, built for the Argentine Republic, is one of the most remarkable vessels which modern skill and science have produced. In speed she surpasses every ship, outside of some of the torpedo boats, in existence. With natural draft she can maintain a speed of 21 1/4 knots per hour, and with forced draft it is possible that two knots more speed could be got out of her. Her armament consists of two 8-inch breech-loading rifles, eight 4.7-inch and twenty small quick-firing guns, and three torpedo tubes.

### PEARLS OF TRUTH.

Reverses are often our best instructors.  
He that goes with wolves learns to howl.  
A friend to everybody is often a friend to nobody. There is wisdom in generosity, and some need to go to school to learn it.  
Every act of self-denial will bring its own reward with it, and make the next step in duty and in virtue easier and more pleasant than the former.  
If instead of a gem, or even a flower, we would cast the gift of a lovely thought into the heart of a friend, that would be giving as the angels give.  
Do to-day's duty, fight to-day's temptation, and do not weaken and distract yourself by looking forward to things which you can not see, and could not understand if you saw them.  
"I know of no principle," says Sydney Smith, in one of his ablest essays, "which it is of more importance to fix in the habits of young people than that of the most determined resistance to the encroachments of ridicule."  
A man may strive for influence and miss it. But let him grow within himself—in self-control, in conscientiousness, in purity and submission—and then he will not miss it. The road to influence is simply the highway of duty and loyalty.  
Looking back upon my writings for the last twenty years, I believe their failure has been in very great part owing to my compromise with the infidelity of the outer world, and my endeavor to base my pleading upon motives of ordinary prudence and kindness, instead of on the primary duty of foying God—foundation other than which no man can lay.

Yesterday is yours no longer, to-morrow may never be yours; but to-day is yours, the living present is yours, and in the living present you may stretch forward to the things that are before.

In the reign of Henry VII. apples were worth from 1s. to 2s. each.

### A Negro Settlement in Nova Scotia.

A little way out of the town was a long straggling negro settlement known as Pine Woods, consisting of small cabins and shanties of the poorest kind. The inhabitants of these miserable dwellings were in part descendants of the Maroons, who had revolted in the island of Jamaica in 1795, and either fled or else had been forcibly removed to England and to Nova Scotia. In 1791, through the agency of Thomas Clarkson, a colleague of Wilberforce in his agitation against slavery in the British Empire, most of these Maroons were taken to Sierra Leone, where the British government had founded a free Christian negro colony; but some still remained, and a few of the Pine Woods negroes were among their descendants. Besides these, there were some negroes whose ancestors had been slaves in the United States, and had either come with their masters and mistresses from New England in early times, or else had escaped on British war ships from Maryland plantation in 1814.

These negroes added much to the picturesque of the town. They were not commonplace darkies, but almost all of them characters in their several ways, and their doings furnished continual amusement. George Bear—the King of the Pine Woods—Bill Jones, Tommy Higgins, Joe Bell, Sis, Soph, Amelia, Becky, Jule, and Harriet were all people of marked individuality. As a rule, they were shiftless, taking absolutely no thought for the morrow; they earned money, but any surplus they had went inevitably toward a big ball or breakdown. Occasionally they became religious and had a revival, when many would be immersed in some pond or running stream, usually the Yo Ho Brook. At these baptizings, as sometimes at their more secular entertainments, jocular crowds would gather, and the scene as the sable candidate came splashing and spluttering out of the water to the singing of interminable hymns, such as

"When John grew a man  
Baptizim began,  
Sing hallelu, hallelu, hallelujah!"

was grotesque indeed. Very likely some of the baptized would next week be beating their wives or tearing out each other's wool; and the knowledge that with them the transition from grave to gay, from the heights of religious ecstasy to the valleys of dark depravity, was so direct and might be so sudden, did not lessen the interest of the Kentvillians in the Pine Woods revivals. A popular revival melody with them was:

"I looked at my hands,  
And my hands look-ed now,  
I'm almost surrounded."

De hebben is dark,  
But de Lord sees through,  
I'm almost surrounded!"

In their balls and parties they, of course imitated as closely as possible the white people's entertainments. How they managed to dance on the rickety floors of their cramped cabins was a mystery; but they danced with quite as much zest as they manifested in their revivals. "Here yo', Beck Jones and Bill Bear, look out fo' yo' selfs!" the floor manager would sometimes say. "What yo' want to go interruptin' this yere dance fo'?" Beck and Bill would then give the floor manager a little strong talk, and not infrequently the evening would end in a general row.—A. W. Eaton in Harper's Bazar.

### Baby in Various Lands.

In Spain the infant's face is swept with a pine-tree bough, to bring good luck.

In Ireland a belt made of woman's hair is placed about a child to keep harm away.

Garlic, salt, bread and steak are put into the cradle of a new-born babe in Holland.

In Scotland it is said that to rock the empty cradle will insure the coming of occupants for it.

The Grecian mother, before putting her child in its cradle, turns three times around before the fire, while singing her favorite song, to ward off evil spirits.

Welsh mothers put a pair of tongs or a knife in the cradle to insure the safety of their children; the knife is also used for the same purpose in some parts of England.

The London mother places a book under the head of the new-born infant, that it may be quick at reading, and puts money into its first bath to guarantee its future wealth.

The Turkish mother loads her child with amulets as soon as it is born, and a small bit of mud, well steeped in hot water, prepared by previous charms is stuck on the forehead.

At the birth of a child in lower Brittany the neighboring women take it in charge, wash it, crack its joints, and rub its head with oil to solder the cranium bones. It is then wrapped in a tight bundle, and its lips are anointed with brandy to make it a full Breton.

In America the child is handed over to a nurse, with instructions to "raise it on the botle."

### The Fingo Chief and the Queen.

The London correspondent of a Manchester contemporary states that Veldtmann, the Fingo chief, writes from Southampton, in his son's hand, the following simple account of his interview with the Queen at Osborne:—"Soon after we had lunched we were taken to one of the rooms, where we met the good Queen, who said that she was very glad to see us. I was asked to say a few words, and I did it with pleasure, first thanking that we had seen her and thanking for the protection that had been done for us Fingoes by the British Government, and added that I wished presenting her with the shield, assegais, and a walking-stick, and said that these were models of weapons which our tribes used to fight with before guns were introduced. She said that she was very glad to receive them. I also presented her Majesty with our photographs and some necklaces worked in beads. May-God spare the good Queen many years to reign."

### The Economy of the Egyptians.

A curious illustration of the domestic economy of the Egyptians has been met with in the unwinding of the bandages of the mummies. Although whole webs of fine cloth have been most frequently used, in other cases the bandages are fragmentary, and have seams, darns, and patches. Old napkins are used, old skirts, pieces of something that may have been a shirt; and once a piece of cloth was found with an armhole in it, with seam and gusset and band finely stitched by fingers themselves long since crumpled and their dust blown to the four winds.