A SKATE-SALL
HOW TO MAKE AND USE IT-A FAS CINATING SPORT
Of skate-sailing in general less needs to be said now than a dozen years ago:" It is wonderfully fine and


## How it is made.

fascinating sport; based on the longing for wings. Who can stand skateshod on the ice with a fresh wind blowing, and not feel that longing?
But although many of us boys had But although many of us boys had long felt that desire, it was only with the introduction of the form of sall of
which I write that skate-sailing came which I write that skate-sailing
into great popularity among us.
Our sail is, to describe it in the sim:plest terms,' simply a triangular piece of cloth, stretched on a T-shaped attached to the body. One of its chief merits is its simplicity. Yet it has other excellent qualities; I know of no other form of sail with which so large a wind-surface can be carried with such complete safety. tached to the body; with a little experience one can even drop it upon the ice if it becomes necessary. In using a sail which is fastened to the bcdy there is always the danger, especially in a gusty wind, when skate-
sailing is at its best, of one's sall besailing is at its best, of
coming unmanageable.
The frame, which should be spruce or light pine, consists of two pieces. The length of the cross-spar should be about twice the distance from the ground to the armpit of the boy as he stands upon skates. Thus, for a boy of sixteen, the cross-spar should be perhaps eight feet long. In order to express myself definitely I shall describe this size of sail throughout, it being understood, of course, that other sizes should the in about the same relative proportion.
The thickness of the cross-spar should be one inch, and its width two and a half inches in the middle, tapering towards the ends. By width, in reference to the spars, I mean that dimension which lies in the plane of the sail.
The main-spar should be twice the length of the cross-spar ; that is, for an eight-foot cross-spar, a sixteenfoot main-spar. The greatest strain on the main-spar is at one-third of the distance from the forward end.
Here it should have a width of an inch and a half, tapering back to an inch at the rear end. The thickness at the point of greatest strain should be two inches, tapering slightly backward and forward.
At a point two inches from the main-spar's forward end it is joined by a quarter-inch at its middle point for this is conven boit, a thumb-nut for this is convenlent but not necessary. Round corners on the forward half of the main-spar make it more omfortable to handle.
The sail proper should bel made of heavy unbleached muslin or sheeting, cut of such a size that, after hems have been made all round-one-half inch wide at the end, and sail shall on the two long sides-the wide shall the a trifle narrower at the wide end than the length of the cross-
spar, and about a foot shorter when stretched than the main-spar.

A quarter-inch rope should now be run through the two side hems, a protruding loop about three feet in lengith being left at the apex of the sail. The ends of the rope, after having been sewed tightly to the cloth at the two angles of the base, are knotted securely to the ends of the cross-yard through holes far enough apart to stretch the base of enough apart to stretch the base of the sail snugly upon the yard, where
it is fastened with tacks. In bolting it is fastened with tacks. In bolting the cross-yard to the main-spar the cloth side of the cross-yard is out-
side. The apex of the sail should be side. The apex of the sail should be
neatly and strongly stitched, but not neatly and strongly
Iastened to the rope.
We now come to what may be We now come to what may be
called the halyards. In spreading called the halyards. In spreading
the sail, the obsect to be secured is the sail, the object to be secured is this: to pull the side ropes taut to the end of the main-spar, and then from swing the cross-yard around in line
with the main-spar and roll the sail up, we will now. go down to the ice for a trial.
The sail is carried on the windward side of the body, the main-spar being held under the arm about three or four feet from the forward end. The lower end of the cross-spar comes a few inches above the ice; the rear end of the main-spar drags.
The centre of resistance is, as I have said, one-third of the distance from the forward end. The whole problem of steering is involved with one's relation to this point.
If you are going directly before the wind you sthould be just at this point. If you are tacking. you should come a little forward. If you would come
out before us far and wide, polished and smooth, and ringing, when struck, like a plate of finely tempered steel. We are off
$\because$ How the wind rushes! Butwe know you of old, Boreas : Many a time have we wrestled with you upon this glassy arena!: We speed away with a swoop, the sharp steel hissing, the wind stinging our faces, the spray from our skates whirling over the sürface. Braced with all our strength, we lean far over upon the wind. Yet a stronger gust has seized us, and we are whirled away like leaves across the ice.
But here we are at the end of our course, and we rush up into the wind; it howls and roars about us, and the sail shakes and quivers. Again we are off on our wild filght back.
There is joy in an ocean-swim, through the surf and out upon the great waves. There is joy in swimming in the brown water of some northern river among great; fragrant logs. I remember moments when tearing over the ice on skates after a 'shinny block' seemed the most glorious thing in life.
Again, there are the memories of long skatings off into the sunset, with fine feelings of freedom and power. Or our skates have led us on into quiet bayous, which stretch back into the depths of the solemn forest. We linger to watch the colors in the west through the branches and among the great trunks of the elms. Then, as we turn homeward in the phantom light of the moon; we hear the reverberating cry of the great owls, and

into the wind, steer closer with your skates and come to the front of the the same point to pull the cloth tight upon the ropes. This may be accomplished in many ways, varying with the inclinations and ingenuity of the builder. I will describe what
is perhaps the simplest way: is perhaps the simplest way
About three inches back from the apex of the sail is sewed, by means of several laps of cloth, an enamelied iron ring perhaps an inch in diameter. The loop of rope already spoken of is pulled taut, and fastened by being passed through a hole in the end of the main-spar ; it is then turned back, passed through the ring, again pulled taut and fastened by being caught over a hook or some such device.
One thing more; the sides of your sail will sag too much unless they are stiffened by a sprit. Somewhat forward of the middle point of the sides the rope is bared of the hem for an inch, the edges of the hem being oversewed to prevent ravelling. inch by one inch notched at the ends, is sprung into place.
Now your sail is done, I believe. You have taken a day or pernaps two to make it. Five dollars is a fair estimate of the cost of material. If you will loosen the halyards and sall, when, of course, all the wind is spilled behind. To come aboul, the sail is shifted to the other arm by being passed over the head and being passed over the head and wrays perfect safety so long as you ways perfect safety so long as you of resistance.
Now, if you are ready let us take a long fight up the river. There is a strong and gusty gale, the kind of The that makes you love the sportace of the ice stretches
the river begins solemnly to boom with the settling down of night.
Among a host of such happy memories I count many a glorious sail on skates.-A. W. Whitney, in 'Youth's Companion.'

TWO WAYS TO WIN.
'I wish to learn the violin,' said she, 'and to make myself famous.' She spoke to a philosopher, who slowly lifted--his tranquil eye and said: "There are two ways. The first and truest is, get the best master that you can, go by yourself and put in several years and practice under his instruction. The second best is, get a fairly good instructor, learn something about the violin, and then go to all your friends and ask them to buy tickets to your entertainment, and get the newspapers to say that you play well. For a while the last succeeds; but if you have really mastered your instrument these social and advertising methods will not be needed, for you will have become like Orpheus, Who had but to put his instrument in motion and even the wild beasts of the forest gathered to Histen.'
The young lady looked at him with widening eyes.
'I know a case in point,' continued the philosopher. 'Two young men were graduated from our best university. They were presentable, fine fellows, one of them particularly handsome and both determined to succeed. I was present at a dinner given by the dean one night; a few years later, and the chief justice was there. .The handsome young fellow who wished to get on helped him of a ladreat-coat, carried the shaw1 himselp ive al and do every one. When I went down from
the dinner I heard the voice of the other young. fellow (he had not beeil asked), who was talking with a group of workingmen on the pavement. They were returning from a meeting that had been addressed by him and he was answering some of their ques tions. Nobody connected with the dinner gave any thoughit whatever to Number Two ; but ten years later the handsome young fellow was still carrying a lady's shawl and helping a man of fame with his great-coat He was charming to have about and made a hit in society; but the other had got in his work in a more thor ugh and solid way. He had gone o Congress, and was the author o standard works on the new political economy, and everybody says he wil yet be himself the chief justice.
The young lady rose and said to the philosopher, while her face glowed Goodbye, and thank you. I am go ing by myself to practice the lesson given me on the violin by a grea master and another lesson just. given me-by a greater.-Frances E. Willard; in 'Union Slgnal.'

A BAD THROAT.
(Bý Mrs. E. J. Richmond.)
'Doctor, please look down my throat,' said a seedy young man to the village doctor.
'Sore throat, eh ?' said the doctor.'
'Worse than that,' said the young man. Consumption, I think. Why, a whole farm, farming implements and all, and a large stock of cattle have gone down my throat, and I haven't a dime to call my own.'
'The trouble is a little higher up than the throat,' said the doctor. 'Why, man! when your father left you that fine, well-stocked farm he thoughit that you had brains enough to keep it.'
'Didn't think that in ten years I'd be a beggar,' said the young man bitterly.
'Well, Tom,' said a friend sitting near, 'I reckon I'm just about as big a fool as you.'
'Why, Jim, you never drink à drop of liquor, and that's what floored me; said Tom.
'No ; but I smoke. I reckoned up the cost thie pother day, and as sure as you live I've smoked cigars enough to pay for a nice farm; and I don't even own the house I live in. We're a. couple of fools, I take it'
'That is a sensible conclusion,' said the doctor.
'Now, you can be cured just as easy as to shut your mouth.'
'Gold cure ?' said Tom
'Better than that. Just resolve : "God helping me, I'll never open my lips to take a pipe or cigar or a glass of liquor,", and if you are a man you're isafe.'
'It looks easy,' said Tom.
'Let's try it,' replied his friend.
'Give me your hand on it,' said Tom.
The men clasped hands.
'Now be true soldiers, and fight for, your sacred honor and your lives,' said the doctor.
And they conquered. Men who are respected and honored in the community, where they own pleasant homes, they' are not likely soon to forget the good doctor's prescription.'Temperance Advocate.'

CHRISTIAN ENDEAVOR ITEMS.
Christian Endeavor now illumines the land of the midnight sun. The first society in Normay was formed few weeks ago in Christiana.
Tennessee Juniors are circulating pledges among the mothers; asking that all eggs laid by the fowls on Sundays be given to them for mis sionary purposes.
Some Colorado Endeavorers have organized a Washington '96 Club, to which each member contributes five dollars monthly towards his convertion expenses next July. 'On to Washington!
Good literature: to the extent of seventy-five thousand or one hundred thousand, pieces, in - the shape of papers magazines and hooks was distributed last year by the Chicago Good Literature Exchange; Box 1013, Good Lite
Chicago.

