PIONEER PASTIMES

Reading the Only Enjoyment for Winter Evenings.

NO ORGANIZED SPORT FOR BOYS

East Side Between Portland and Oregon City Once a Great Rendezvous for Deer.

PORTLAND, Nov. 8.—(To the Editor.)—The Territory of Washington, when it was set apart from Oregon, March 2, 1853, contained less than 4000 people, and these were scattered in isolated families and little groups. In the adjoining Territory of Oregon the situation was the same. The girls helped in the housework and care of children as soon as they could walk, and at 15 were apt to be themselves married women. The boys worked weeding the carrots and doing the chores, and at 14 did a man's work on the land. It was a strenuous life and pastimes were almost unnecessary, for there was no time to kill. Of organized sport there was none, and no better line of demarcation between pioneer and modern days could be found than the time when organizations for baseball, rowing and other sporting purposes first became possible.

In these isolated families reading was the only pastime for the long Winter evenings. It largely supplied the deficiency of schools. The fathers were occasionally university men, the mothers cultivated women. One day a rough pioneer coming in out of the wilderness picked up a Greek Testament on my father's table and read it without difficulty. The Bible and Shakespeare they knew from cover to cover, and the children soon grew equally familiar with them. Our people having nothing else, Milton, Plutarch's Lives, Josephus, Southey's British Poets, Cyclopedias of British Literature, The Spectator and Tatler, Roderick Random, Don Quixote, Gil Blas, Scott's and Cooper's novels, and books of this character, were read over and over again. Such reading would hardly now be called sport, but it was the only pastime many children had.

To write of early sports in Oregon and Washington is to write the autobiography of a pioneer child, for his world was bounded by the prairie or wall of timber that circled the clearing on his father's donation land claim, and his play imitated actual life, and in little children was molded largely by Indian playmates. I cannot remember a day when I could not take care of myself in the water, ride a horse, handle a canoe or shoot with bow and arrow. On the lower Columbia, especially, the sports of young children were largely on and in the water, and it was an odd sight to see three or four little white boys and 20 or more little brown Indians with grotesque little bellies and Brownie-like legs, all as naked as they were born, splashing around in the river, racing canoes or lying on the bank to dry. The actual games of the Indians were also adopted, mock hunting or fighting, and especially the Indian gambling. With a carved piece of bone concealed in one hand, the little Indian stood before his infantile white victim, and, swaying backward and forward, brought his hands alternately before his body and behind his back in time to a monotonous chant of "Ah-yah, ah-yah, ah-yah," and then, with a quick movement and sharp cessation of the noise, held his hands before him for a guess as to which concealed the bone. How many needles, matches, spools of thread, etc., were appropriated by white children to gamble for dried clams and camas root the statistics say not, but many a spanking impressed upon the rising generation the evils of gambling. The making of tamanawas, or medicine, by the Indians ever their sick was another occasion of great joy to the little American boy of the lower river. To stand in the long row on each side of the low timber lodges of the Chinook Indians, beating the roof with a pole and jumping up and down to the tune of the Indian sing-song and thus to help the funny doctor cure a sick Indian was simply enchanting. No harm came of it unless it was to the patients, and no objections were made until in a drunken spree the Indians chased the children home with naked knives, when the youngsters' share in the healing of the sick was stopped very suddenly.

The coming of the monthly mail boat up the Columbia River from San Francisco was an event looked forward to for days, and long talked of afterwards. As she passed Cathlamet a little home-made American flag was always hoisted by the assembled children, white and red, and invariably the steamer responded by showing her colors, and sometimes she would dip them, and occasionally, on some red-letter day, would fire her cannon as she passed. I wonder if those rough-and-ready old captains ever knew the pleasure they gave by signaling as they did from the great world outside to these little detached outposts of civilization. Even the mothers looked forward to steamer day, and the glimpse of the passing boat. Every little Indian except one that ever gathered around that flag is dead, and the flag itself finally shrouded the form of the brightest of them all, the Northern Indian "George," as the Episcopalian burial service was read by my father over his lonely little grave.

Portland, in 1859, '61 and '62, was becoming a city, and the boys had so risen in the associated social scale that two-old-cat and other games that required numbers were possible. The Indian element was disappearing, and more and more came Eastern blood and Eastern games and amusements. Nevertheless, fishing and hunting were the principal amusements of the most active boys of the day, and kite-flying, playing marbles and similar amusements were only stop-gaps. Tanner's Creek, now running under stone archways from the lower reservoir, was then a first-class trout stream, up from where Washington street now crosses it, and I do not think that there is a boy who was then in Portland of fishing age who did not fish the stream at one time or another. In the woods, which then extended from Seventh or Eighth streets to the hills, we hunted squirrels and even grouse and pheasants with bows and arrows, and in the little streams we built dams and floated miniature navies.

As the people gathered more and more into towns and villages the primitive instinct in the boys showed itself in camping parties and long trips in the mountains. About Portland and the northwestern part of Oregon, and Southern Washington, there were certain well-recognized places from which such expeditions started, among the most notable being Rose Farm back of Oregon City, now, as then, owned by the Holmes family; the White Farm, near the same place, and the farm of Colonel Jennings, on the river this side of the Clackamas. Many expeditions started direct from Portland, either in rowboats, wagons or on horseback, and the boys of Yamhill County used regularly to go to the Coast or the Coast Mountains. Astoria and Olympia were also common places of rendezvous for hunting trips, and Skamokawa and Saddle Mountain were the most noted elk hunting grounds of the time. Not a year passed but one or more of these trips were made. The adventures and success varied, but the incidents of one trip represent fairly the incidents of all, and in one of the earliest I remember the party started from the White place with a heavy wagon, two horses and a motley array of riding ponies. There was only one man in the party, and he knew nothing of hunting. The boys were six or eight in number, and could not have averaged more than from 12 to 15 years old.

Striking off to the southwest from Oregon City, we sampled every orchard and were hospitably received at every farmhouse on the way; passed beyond the settlements and came to Wilhoit Springs, then in their natural condition, where we camped. Hearing of a deer lick farther on, six of us decided to watch by it during the night. After a hard tramp over a blind trail, we came at dark to a spring in the woods which was evidently much used by game. Deer trails were worn to it in every direction through the salal brush. Selecting a spot about 100 yards away, where we could see over the salal, we awaited developments. Developments arrived. Of course we had no fire, and with night came a darkness so dark that we could not see each other. We could hear the deer walking down the trails and splashing in the pools, but to aim was impossible. Just what time in the night it was, none of the frightened boys could ever say, but suddenly the cry of a hunting cougar sounded so clear and loud that it seemed right in the party. No one who hears that cry in the woods ever forgets it. Even old hunters do not like the devilish wildcat scream that has in it a note as of woman or child in extremity. The cougar hunting down to the spring had suddenly blundered upon our party, and unmindful of the deer, which we could hear scattering in every direction, was intent upon looking the humans up, and, half eager and half afraid, was almost on us. One of the boys insists to this day that he saved my life by hauling me out from under the paws of the big cat, but all I know is that in an instant a frightened lot of boys were clustered together in the darkness, so scared that every one of them wanted to go home to his ma, and wanted to go home quick. All night the brute kept up a stealthy walk around us, occasionally coming close in, when we would frighten him away by firing at him. Just before dawn he decamped, and with the daylight came courage. Whatever astronomers and other wise men may say, that night in Oregon was 50 hours long.

The next day, after abandoning the wagon and packing the horses, the party went over a rough trail into the mountains to Table and Panther Rock. Here, by a beaver dam in a small prairie, we made our camp and organized a big hunt, to be conducted strictly by daylight. It was a rough country, covered with heavy fir timber and a great deal of underbrush, but with occasional little open prairies of a few acres each. They posted Charlie J. and myself at a point in the woods a mile or two from camp, where a sharp ravine opened the only path down a precipitous rock wall, and gave us careful instructions what to do if elk should go down or up this trail. We, being the little fellows of the party, were thus happily disposed of. That day was a long one, too, for we were bound to wait for the other hunters to come back, and the woods grew so fearsome that we were nearly desperate. Noon passed and a little relief was obtained by eating the slice or two of bread brought with us for lunch, but after that the loneliness fell upon us in masses. An Oregon forest in its natural condition could have given the Ancient Mariner suggestions on loneliness.

The afternoon slowly dragged away, fearful doubts arose as to whether the other boys could find us again and whispered consultations were held as to what we should do in that event. I was busy cutting my initials on a tree when Charlie with an odd sound of relief in his voice said that one of the boys was coming. He stepped out a little farther and announced that there were two of them, and then in a shout: "Tom, it's a bear; the biggest bear I ever saw," and bang went his gun. At the sound of bear I was on my feet gun in hand. Across the ravine not 20 yards away on a rocky pedestal upon which he had stepped from out the brush and looking big enough to eat 40 boys, was the most magnificent specimen of a black bear I have ever seen, and I have seen many. At the crack of the old Yager rifle he fell, struggling fearfully. The excitement was intense. Charlie wanted my gun, but I needed it, and so he started to reload his own, pouring the powder out of his powder-horn loosely into his hands. All my reading had led me to expect a charge, for that is what wounded animals do in books. So I stood trying to steady myself for the moment when the big beast should come charging in and everything would depend on one shot. The suspense lasted only a few seconds, for the wounded brute scattering gravel and dust in every direction, caught the ground with his powerful claws, and with a rush went off at right angles directly over the face of the cliff, 100 feet to the rocks below. Charlie and I crept to the top of the rocky wall and listened. We could hear the bear groaning below and promptly decided that it would be indelicate to intrude upon his last struggles. And great glory was ours, and we were the babes in the wood no longer, for when the other boys came back they found a badly smashed bear and two boys who did not know what fear was. That night Charlie preferred not to shoot off his own gun and we fired it with a string from behind a tree and so proved his wisdom, for it went off like a cannon, and would certainly have kicked him into the next township.

Following the same line of sport, but later on, packs of deer hounds were gathered at different places. There were several in and about Portland. Gassy Charley and Buckskin Bill, two noted local characters, the latter of whom was either killed or hung for killing somebody else, I have forgotten which, kept assorted lots of deer dogs, and many notable men hunted behind these dogs. But these packs did not compare with the one that was used by the Portland boys. Bolivar, a heavy, short-legged hound with long, flapping ears was at the head of it, and was probably the most noted dog that ever ran in this section of the country. There was a dash of bloodhound in him, and he feared nothing and was so savage that it was impracticable to punish him without first tying him up. With him was Nellie, Smike and other dogs of the first class, and it was an unfortunate day for the deer when they ranged the woods. The favorite hunting ground was the west bank of the Willamette River between Portland and Oregon City, which in those days fairly swarmed with deer. At least once a week the hunting parties went out and it was characteristic of the day that the hunting had the same stern utilitarian purpose as all the other pionee work. No chances were given the deer and men and dogs hunted for venison. When the hunting was this side of Oswego a boy with a rowboat was stationed on the east side of the river about the lower end of what is now the Waverly golf links, and another was stationed on the same side opposite Elk Rock, above Milwaukie. The dogs were taken in over the ground now occupied by the Riverview Cemetery, and generally a deer was raised within a half mile of the water. If not, the dogs would be taken over into the little valley of Tryon Creek, at the old Collins place, and here a deer would always be found. Sometimes a chance would come to get a shot as the deer was jumped or else on the runways as he made for the river. If he escaped these perils and reached the river the boy in the boat was expected to gather him in. Often the deer would go south or west to Sucker Lake or the Tualatin River and give the hunters a weary and profitless day. Many of the boys who killed their first deer before this pack are dead, but others remain who when they read this will have recollections of the deep toned hounds and the sharp crack of the rifles under the cliffs of Elk Rock. Officers of the Army, noted foreign officers and visitors used often to go out on these expeditions. If I remember correctly General Crook, the Gray Fox, used regularly to trudge the road along the river and patiently wait his chance for a shot, for this pioneer hunting was democratic, and it made no difference whether it was general or merchant, saloon-bummer or little boy, he shot the deer who was at the right place at the right time and knew how to aim.

Gradually the city extended. The farms increased and hunting with hounds became impracticable and unduly destructive and went out of fashion. Baseball clubs were formed. The Pioneer Baseball Club crossed bats with the Athletic Baseball Club, and fat old merchants and business men who could not now run a hundred feet, then slender young fellows, played what was in our eyes most wonderful ball. La Chapelle built a boathouse and commenced the manufacture of the first light rowing shells that we had ever seen. Boat clubs and athletic Associations were formed, the railroads came and pioneer days were over. From the Indian dance to the ancient and royal game of golf as it is now played is a long trail, but Oregon and Washington have trodden it within the memory of even their young men.

THOMAS N. STRONG.

MAKING COLONELS TO ORDER

How Justice Harlan Kept Kentucky in the Union.

SOUTH BEND, Wash., Nov. 9.—In 1861 President Lincoln was greatly troubled over the secession tendencies in Kentucky. At that time the now Justice Harlan, of the Supreme Court of the United States, was a vigorous, active young Republican of Kentucky, and was Lincoln's confidential adviser for that state. An election for members of the Legislature was approaching, which was to decide whether the state should cast her lot with the Confederacy, whether it would remain neutral or whether it could be relied on to stand by the Lincoln administration. The President sent for Mr. Harlan to consult with him, and in a lengthy interview Mr. Harlan suggested a plan by which Kentucky could be saved to the Union.

Mr. Harlan being well acquainted with the peculiar characteristics of the people of his state, asked the President to give him the authority to go there with blank commissions, none of which should be above the rank of Lieutenant-Colonel, and to establish headquarters in Louisville, to which he might invite the leading young Democratic attorneys, physicians and clergymen of the state to call for purposes of consultation.

Gilded Bait.

The authority was granted,, and in a short time Harlan's Louisville headquarters were thronged with young fellows, eager to ascertain what was wanted of them. One by one they were taken into the private office and sized up. Each was told of the grave condition of affairs in Kentucky, and that the President of the United States fully appreciated his great worth and influence. Moreover, Harlan informed each caller that he had been authorized by the Executive to tender him a commission as an officer in the Federal Army, which, if accepted, the recipient would be expected to at once uniform himself according to his rank, and to wear that uniform, at his home, at his business, or wherever he might be, until suitable commands were recruited, to which he would be assigned.

The military titles were made to "go as far as possible" and were judiciously awared with reference to the dignity and bearing, as well as the ability and extent of influence of the applicant. Hundreds of the best and bravest of Kentucky's young men were induced to cast their influence and their fortune on the side of the Union, notably among them being General James M. Shackelford, who had already partially organized a Confederate regiment in the state, and who was influenced by the eloquent and patriotic appeals of Mr. Harlan to not only accept a Lieutenant-Colonel's commission, but induced his men to followw him into the Federal service.

General Shackelford and his men thus recruited subsequently helped capture Confederate General John Morgan who made the memorable raid through Indiana and Ohio. Morgan, on his surrender, delivered his sword to Shackelford. The latter subsequently creditably filled the position of Federal Judge in Indian Territory, where he now enjoys a lucrative legal practice.

Nearly every man whom Justice Harlan sent for accepted his commission and donned the proper uniform, and, as a result, the Union sentiment in Kentucky was increased to that degree that, when the election occurred in August, 1861, it resulted in a complete victory for the Lincoln Administration. Kentucky, at the time, fairly swarmed with men with Federal shoulder straps. The scheme did more to influence Kentucky to cast its lot with the Federal Government than any other one thing adopted in that memorable campaign.

MARION D. EGBERT.

Reminiscence of a Thespian.

Indianapolis Sun.

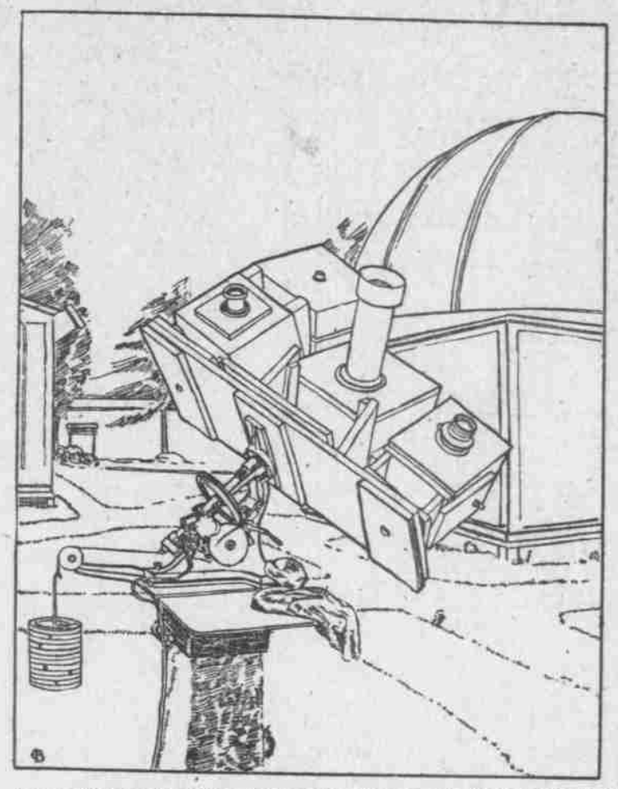
At Brighton Beach I hit Mose Rosenstein, who was organizing a one-night "Faust" company for a job. "What part do you wish to take?" he inquired shortly. "I wish to take the part of Mephistopheles, of course," I answered, drawing myself up proudly, for I had on a new suit of clothes, and could afford to look him in the face. "And why do you wish to take that particular part?" he inquired. I was amazed at his dullness, but concealing my disgust as far as possible, I explained that it was because the devil always gets his dues. He seemed pleased at my repartee, wrote me out a $500 per week contract, and paid me my first week's salary of $7 50 in advance. I played the devil in "Faust" until nearly the end of the season, after which I was cast in "The Foundry," a workingman's play.

READY FOR RAIN OF STARS

GREAT SHOWER OF LEONIDS NEXT TUESDAY NIGHT.

Novel Apparatus at Harvard University of Photographing Shooting Stars.

CAMBRIDGE, Mass., November 10.—The most interesting astronomical question just now is whether the great meteoric shower which was due in November of last year, but which did not then appear, much to the disappointment of astronomers all over the world, is to be given up as lost, or whether it has merely been delayed a year beyond the calculated time, and will take place in its full glory next week. The attitude of the Harvard College observatory in this matter is probably typical of that taken at most astronomical stations. While admitting that the chances of the shower appearing are less than a year ago, Professor Pickering and his assistants have not by any means given up hope, and though the preparations which have been made for recording it are less extensive than they were last November, they are still sufficient to take full advantage of the situation in case the shower occurs.



A group of Cameras in position at the Harvard Observatory for Photographing the November Shooting Stars.

The November shooting stars are, of course, a recognized institution, and are due on the 13th and 14th of the month each year. They are known as the Leonids, from the position of their central point in the constellation of the Lion, and the number seen in ordinary years would range from 50 or 100 to 800 or 1000. The Harvard observatory noted some 800, for example, last November. But what was expected last year, and is hoped for next Tuesday night, is a recurrence of the magnificent displays which were seen in 1799, 1833, and 1866, when not hundreds but thousands and tens of thousands shot into the earth's atmosphere. In 1833 a competent observer in Boston calculated that the number had amounted to 240,000, seeming to the eye to fall as thickly as the flakes in a snowstorm. It may easily be seen how such a display would rank with a total eclipse of the sun as the most spectacular of the celestial phenomena.

The interval between these great meteoric showers, as may be noted from the dates just given, is 33 years. But the nature of the shooting stars is such that they are peculiarly liable to perturbations, so called, caused by the attraction of the planets. Within the last 1800 years, indeed, they have been swung out of one orbit and into another by the influence of the planet Uranus. During the last period of 33 years, it sems, they have been especially liable to perturbation, and some astronomers who look for the great shower to take place next week, ascribe the delay to this cause.

It is necessary to understand the Leonids as a stream of small particles, no larger than grains of sand—the debris, perhaps, of a comet—flowing continuously in a mighty orbit, which annually, in the middle of November, intersects the orbit of the earth. Through most of the length of this belt the particles are only sparsely scattered, but in one place they are congregated in a vast swarm, with relation to which the others may be regarded only as stragglers. The Leonids complete their orbit in 33 years time, and once in 33 years, therefore, when we enter the part of the great swarm, we may look for such a display as that of 1833 or 1866. In other years we see merely the "stragglers." In time, of course, the particles will be scattered more evenly through their orbit, since the outer ones take more time to complete the circuit than the inner ones, and tend constantly to fall behind in the race. But this is a matter of millions of years, like so many other operations in astronomy.

In passing through the orbit of the Leonids we see only the particles which are ignited by entering the earth's atmosphere, some 100 or 200 miles distant. No Leonid was ever known to reach the earth, the terrific heat to which they are subjected burning them out before they have approached nearer than 50 or 60 miles. They are to be distinguished entirely from the sporadic meteorites which from time to time appear as fireballs in the sky, and sometimes fall to the earth before they are burnt out in masses weighing thousands of pounds. A shower of such as these would be disastrous, while the Leonids are quite harmless.

In the 1833 shower one observer likened the appearance of the sky to a vast umbrella. This was due to the fact that all the Leonids, seeming at first to be darting in every direction in the heavens, radiated from a certain fixed center, the co-called radiant, alluded to before as being in the constellation Leo. As a matter of fact, the course of the Leonids in the sky is parallel, and the appearance of radiation is due to perspective, as in the parallel lines of railway track, which seem like the Leonids to originate in a single point. The radiant, however, is only approximately fixed; and it is an important point, therefore, to establish it more exactly, since, from the position of the radiant, astronomers are able to calculate the direction in which the Leonids are moving. Photography, it is hoped, will do a great deal to settle this point. Protographs taken with the Harvard instruments, both here in Cambridge and at Arequipa, Peru, have very satisfactorily recorded casual meteors crossing the field of vision. On one in particular, where three shooting stars of a single system had been recorded, it was observed how exactly the point of radiation could be defined by the convergence of the three paths, especially in comparison with a visual observation of the three meteors which was fortunately made at the same time. If next Tuesday the great swarm reappears, therefore, and if the weather conditions are favorable, the Harvard observatory hopes to secure on its photographic plates complete data for determining the radiant, and consequently the direction of the Leonid swarm.

Some of the photographic appliances to be used—always supposing the swarm reappears—have been especially devised for the occasion. The most remarkable, perhaps, is a swinging camera, for securing stationary images of the Leonids. It is like the swing of a pendulum—in a state of balance at either end; moving faster, comparatively, than the shooting star at the middle, but at some point between, on the rise or the fall, exactly corresponding to the velocity of the object which it is all this time photographing. Besides getting the image at rest in this way it will be easily possible to calculate the speed of the meteor by ascertaining the position of the camera in its swing when that image was secured.

Another interesting instrument is fitted with prisms to photograph the spectra of the Leonids, from which it will be possible to learn their composition. The only spectrum of a shooting star ever secured by photography was obtained at the Harvard station at Arequipa four years ago, and shows by its lines the presence of hydrogen. Still another photographic instrument has a rotating disc over the aperture, revolving thirty times a second. In the disc is a hole which, passing over the aperture, records the path of the meteor in a series of dots. Any difference in the distance between the dots would give an indication of a difference in the rate of movement of the meteor.

The preparations at the Harvard observatory last year were on a very extensive scale, and covered a number of stations—three in the vicinty of Providence, R. I., and two, including the observatory itself, near Boston. The plan for the work in Cambridge was an admirable example of the way astronomers are able to systematize difficult and complicated observations, and will be followed, if opportunity offers, next week. Aside from these in charge of the photographing, the staff will be divided into counters, time-keepers, recorders, cloud-observers (to note interruption in the observations), and draughtsmen.

The matter of time is, of course, most important. A gong will strike automatically every 10 minutes, so as to afford a constant check on the observations. At the beginning of observation the counters will have stationed themselves to watch the portion of the sky containing the constellation of the Lion, and count the meteors as they appear, while the time-keepers note the time of each as exactly as possible—a difficult undertaking when it is remembered that the meteors may possibly fall at the rate of over 50 a minute. The record will serve to identify all, or at least a great many of the meteors by a serial number and the time recorded.

The general observers will look for special features, like the magnitude, color, whether the stars explode or not, and whether a trail appears. A general observer, for example, may note that the 112th meteor marked by the counter was yellow and left a trail lasting 10 seconds, and that its path was from near some standard star to another standard. His notes can be compared later with the observation sheets of the other observers. With each general observer will be a recorder, to note according to a code the phenomena which he announces.

The draughtsman will be supplied with maps of the region around the constellation Leo, and they will draw the path as well as possible of each notable meteor. The direction and line of the 112th meteor, for instance, its brightness and the character of its trail, are useful facts. The matter of brightness necessitates the quickest observation, which offers, however, no special difficulty when one has nothing else to attend to. The scale adopted (if one may go into technical details for a moment) is to assign a magnitude of minus 2 to a meteor a little brighter than Sirius or Jupiter; 0, if equal to Capella; 2, if equal to Gamma Leonis, the bright star in the blade of the Sickle, which stands out clearest in the constellation Leo; 4, if equal to Mu Leonis, the second next star to Gamma in the Sickle; 5, to faint meteors generally.

A year ago the Harvard observatory asked for the co-operation of observers all over the world—not only astronomers, but intelligent laymen everywhere—and a full circular of rules to govern such observers was sent out by the University. The most important part of the circular is as follows:

"The most important time for observation is from midnight until dawn, as comparatively few meteors are expected earlier. Observations are particularly needed at hours when they cannot be made at the observatories of Europe and America. In general, the time required for 10 or more meteors to appear in the region covered by the accompanying map should be recorded. This observation should be repeated every hour or half hour. If the meteors are too numerous to count all those appearing upon the map the observer should confine his attention exclusively to some small region, such as that included between the stars Mu Ursae Majoris, 40 Lyncis, and Delta and Alpha Leonis. If the meteors occur but seldom, one every five minutes, for instance, the time and class of each meteor should be recorded. Also note the time during which the sky was watched and no meteors seen, and the time during which that portion of the sky was obscured by clouds. Passing clouds or haze, during the time of observation, should also be recorded. The date should be the astronomical day, beginning at noon; that is, the date of early morning observations should be that of the preceding evening. Specify what time is used, as Greenwich, standard of local time. When a meteor bursts, make a second observation of its light and color, and, when it leaves a tail, record the motion of the latter by charting the neighboring stars, and sketching its position among them at short intervals until it disappears, noting the time of each observation. If the path of a meteor is surely curved, record it carefully upon the map."

"Photographs may be taken, first, by leaving the camera at rest, when the images of the stars will trail over the plate and appear as lines; or, secondly, attaching the camera to an equatorial telescope moved by clockwork, when a chart of the sky will be formed, in which the stars will appear as points. A rapid-rectilinear lens is to be perferred in the first case, a wide-angle lens in the second. The full aperture should be used, and as large a plate as can be covered. The most rapid plates are best for this work; they should be changed once an hour and the exact time of starting and stopping recorded. Care should be taken to stiffen the camera by braces, so that the focus will not be changed when the instrument is pointed to different portions of the sky, especially if the lens is heavy. If the first method is employed the position of the camera should be changed after each plate, so as to include as much as possible of the region of the map upon each photograph. If pointed a little southeast of Epsilon Leonis, the radiant will reach the center of the field about the middle of the exposure. A watch of the region should also be kept, and the exact time of appearance and path of each meteor as bright as the Pole Star should be recorded. The plates should be numbered on the film side with a pencil, and should be sent to this observatory with accompanying notes and other observations. After measurement here they will be returned, if desired. The value of the results will be much increased if similar photographs can be obtained by a second camera from 10 to 40 miles distant, and perfectly north or south of the other."

Amateur observers interested in watching the meteors may find the constellation of the Lion readily by taking the Great Dipper as a starting point. It will be remembered that the two outside stars of the bowl of the dipper are used for pointers to the Pole star. Take the other two stars of the bowl as pointers, in the opposite direction, till a large, first magnitude star is reached, about 10 times the distance between the two pointers. This star will be found to be at the end of the handle of a rather close representation of a sickle, which is the most obvious pictorial character of Leo. The radiant of the meteors is a little north of the center of the sickle. The paths of the meteors will appear shorter as one approaches the radiant, those close to the point being little more than flashes of light. They then progressively lengthen, till meteors half the arc of the visible sky away will almost encircle the heavens.

INITIATION PRANKS.

Varsity Girls of Syracuse Have a Lark With Black Cats.

Syracuse Journal.

Fraternity initiations on University Hill are supposed to be entirely secret, but occasionally a story of some of the final ceremonies will leak out. A certain amount of fun is included in the initiations of a few of the fraternities, and the fun for the girls of the sorority in question recently took a strange course, but it was still funny, although more funny for the neophytes than for the initiators.

The story was let out by some careless talking of one of the girls. The same girl will probably not tell another, and, inasmuch as the name of the sorority is not divulged, the story does no harm.

There are six girls' fraternities on the hill. They are commonly known as sororities, although some of them are technically fraternities. The upper-class girls of this sorority were cleanly outwitted, as the story goes.

The candidates were brought before their prospective sisters and told with much solemn impressiveness that their chances for being taken within the sacred bonds were decidedly doubtful. They would be obliged to show their desire by performing a very difficult task.

The candidates were crestfallen, for their hopes had been high, but they had not expected to be sent away to climb a glass tree, to hunt for the white raven's eggs, or to climb seven high mountains and swim seven deep rivers to find a beautiful Prince.

When, however, they were told that their entrance depended upon their bringing each a black cat without one white hair in its fur, and to place it in a basket on the steps of the chapter-house before a certain hour, their fears were somewhat subdued. The time in which to work was short, the city was strange and friends were few; but there was hope.

One of the freshman girls of this sorority is clever. Her head helped the others out of a pending disaster. The black cats were secured within 43 minutes. The remainder of the six hours allotted for the search for the black cats was spent in a general spree, which ended with the first freshman banquet.

Promptly at the hour the candidates filed to the chapter-house steps, and in the twilight carefully deposited their cats, each in a little basket of similar appearance. The upper-class girls peeked from behind the curtains and patted one another on the back to think that they had a delegation which could find black cats in six hours.

When the candidates had gone they stealthily crept out; but when they picked up the baskets the cats seemed to lack weight. Eagerly the upper-class girls crowded around each basket to find—not a cunning little kitten with big black eyes, but seven numbers of the popular magazine The Black Cat, without a white hair.

The joke was on the sorority girls, but they were content after initiation to stand a treat of wafers and hot chocolate for the crowd, for the girl who invented the scheme had rejected "bids" from two of the other sororities.

The Roman Catacombs.

Catholic World.

The catacombs form a network of passages, or subterranean galleries, excavated in the tufo that underlies so much of the district around Rome. At first confined in extent, and with boundaries more or less regularly defined, the passages became interlaced as they continued to extend, till they formed the apparently inextricable labyrinth they now present. In the sides of these galleries are rows of horizontal niches, each the length of a human body, some large, some smaller, according to age, called, in the language of the epitaphs, locus or loculus. These are mostly single, but when constructed for two bodies they received the name bisomus; if for three, trisomus; for four, quadrisomus. Rarely larger excavations are found, which are called polyandra, where many bodies lie interred together. The loculus was closed sometimes with a marble slab, more frequently with tiles closely cemented. Often the name of the deceased is carved on the marble, or painted with minium on the tiles, with acclamations full of affection and hope, frequently rudely executed, sometimes badly spelled, but always touching in their simplicity. Symbols and figures expressing the finest sentiments of the Christian faith, and prayer; a monogram, a dove, an olive branch, are met with; but by far the greatest number of those graves are nameless, and a mark made in the wet lime—a gem, a coin, a shell, vessels of various kinds, even a bit of brick imbedded in the mortar—was all that was placed by the relatives to indicate the resting place of the deceased.

They Two.

Mrs. Frank A. Breck in Youth's Companion.

They are left alone in the dear old home,
After so many years,
When the house was full of frolic and fun,
Of childish laughter and tears.
They are left alone! they two—once more!
Beginning life over again,
Just as they did in the days of yore,
Before they were nine or ten.

And the table is set for two these days;
The children went one by one,
Away from home on their separate ways,
When the childhood days were done.
How healthily hungry they used to be!
What romping they used to do!
And mother—for weeping—can hardly see
To set the table for two.

They used to gather around the fire
While some one would read aloud,
But whether at study or work or play,
'Twas a loving and merry crowd.
And now they are two that gather there
At evening to read or sew,
And it seems almost too much to bear
When they think of the long ago.

Ah, well! ah, well! 'tis the way of the world!
Children stay but a little while,
And then into other scenes are whirled,
Where other homes beguile.
But it matters not how far they roam,
Their hearts are fond and true,
And there's never a home like the dear old home,
Where the table is set for two.

The First Fire of the Season.

Edith M. Thomas in Harper's Bazar.

The first fire of the season warms my hearth;
Like a bright moth that long enshathed has lain,
Shaking its wings of many an Orient stain,
It leaves the prisoning oak log's sturdy girth,
Fresh with the new old gladness of the earth,
Renascent, it springs forth; and I am fain
(Having beheld the Summer droop and wane),
To think that here she has her true rebirth.
Ay—the sweet spirit of the Summer flown!
For, when beside the fire I close my eyes,
I hear so many sounds that I have known
In Summer shade, or under Summer skies—
The whir of insects in the fields new mown,
The call of birds, and happy leaf-drawn sighs!

HOW IT ALL HAPPENED!

—St. Paul Pioneer Press.