THE HERALD.

PART II—PAGES 9 TO 12.

LOS ANGELES: SATURDAY MORNING, SEPTEMBER 9, 1893.

DECOYING FISH.

SKILLFUL INDIANS OF THE NORTH HAVE QUEER METHODS.

They Cut a Hole In the Ice, Build a Hut Over the Hole and Let Down a Decoy Through the Ice—Fooling Innocent Creatures of the Deep Lakes.

"You have heard of shooting game by means of decoy birds often enough no doubt," said an old sportman the other day, "but I doubt if you ever heard of fishing by means of a decoy fish, where the decoy was not used for bait. I never saw it done myself till I visited Georgian bay, a part of Lake Huron, in Canada, one winter. There I found that the half breed Indians erected huts on the frozen bay and fished through holes cut in the ice by means of a queer decoy.

"In order to facilitate matters, some of them had little stoves in their huts to keep them warm while they fished. The huts had only one opening, a door, and when the fisherman had entered and closed the door no light entered the hut except what came up through the floor, reflected through the ice outside and the water underneath it. This made it possible for the fisherman to see deep down into the water and difficult for fish to see him in his dark hut. The fisherman has a chair or bench to sit upon, food and drink to keep life in him during his long watch and a little stove to prevent chill. Now comes the decoy business.

"The half breed takes out of his kit a queer looking stick, painted and shaped roughly to look like a fish, he avers, though it would hardly be breaking the second commandment to worship it, for it is the likeness of nothing in the heavens above, or on the earth beneath, on in the water under the earth; but if the fish think it is the main object is accomplished. This wooden counterfeit of a fish is loaded with lead, so that it sinks and lies in the water the right way when suspended from the middle of the back by a string attached to a short fishing pole. The Indian lets this decoy down into the water and by means of the string gives it a series of short, sharp jerks, which make it a dart hither and thither in a remarkably lifelike manner, although, of course, its range is exceedingly limited, about a yard in any direction.

"The thing is provided with tin fins and tail and is weighted with lead most heavily at the head. The string is attached nearer the head than the tail, upon the back, and the skill with which these fishermen make the queer thing shoot about in a triangle under their feet, through a hole in the ice, is truly remarkable. I did not succeed in acquiring the art myself. I should say from watching it that it is rather more difficult to learn than fly casting.

"Presently a few fish, noticing this queer thing darting about as if in active pursuit of his food, swim that way to see if there is not something there for them to eat. They may be fresh water herring, chub, trout, whitefish or less valuable fish, but none of them, big or little, is refused by the half breed. Fine fish he sells; the coarse ones he or his dogs or his children or his squaw eat readily.

"Pulling up his decoy, the fisherman lets down a baited hook and tries his luck on the newcomers, seldom in vain. These men fish with all sorts of queer bait. I saw one man make a splendid haul one day, using for bait only a big white bone button without any hook. The fish swallowed it greedily, and he would jerk them out of the water before they could get it out of their throats. By and by a pike or dogfish, seeing the shoal of fish around the pole, darts after them. They scatter in a hurry, and the fisherman lets down his decoy again to attract the pike.

"Now all the skill at his command must be employed to make the decoy work well, for if it lags in the water long enough for the pike to suspect its genuineness he will turn away in disgust. If the decoy deceives the wily pike he dashes at it, and the fisherman jerks it away before the pike can grab it in his strong jaws. The pike turns to pursue, and as he halts to turn the fisherman drives at him with a long forked spear. If his aim is accurate, the pike is transfixed and is brought bleeding to the surface in a jiffy.

"These men are skilled hunters and know many curious habits of the creatures they pursue. They say that muskrats, for instance, are able to swim long distances under the ice in this manner: Taking a long breath, the muskrat dives from his pursuer and swims as far as he can. When he can go no longer without a fresh breath, he comes up under the ice, and pressing his nose against it breathes out all the air in his lungs. This forms a big bubble under the ice, and the Indians say that the ice has the power of making that bubble of air fresh again, oxygenizes it in fact, and that the little fellow then breathes it in again and dives once more. This he can do half a dozen times, the Indians say, before the air he took with him becomes so foul that the ice cannot freshen it again.

"Whether this property of the ice is true or not I cannot say, but the Indians firmly believe it, and I know that muskrats can travel a long way under the ice, and I have seen them come up under the ice, press their noses to it awhile and then dive again. Perhaps some scientist might explain the case."—New York Tribune.

The Southerner at Home.

The southerner at home is prone to neglect his headgear for the sake of having his feet well shod, and he will go about in public places wearing a battered and soiled slouch hat, but scrupulously neat as to his footwear. The peculiarity perhaps arises from family pride, a besetting southern sin, coupled with the belief that aristocracy is evinced in the shape and size of the feet. It is worthy of note, however, that the southern slouch hat is often a costly article of the finest and most durable felt. Such a hat for winter and a costly and indestructible Panama straw for summer are the proper headgear for a southern country gentleman.—Chicago Herald.

WHERE "FAKE" COMES FROM.

It Was a Theatrical Term, Which Found a Champion In Mr. Howells.

There is one word which the larger vocabulary of the public has lately taken from the smaller vocabulary of the playhouse and which some strolling player of the past apparently borrowed from some other vagabond familiar with thieves' slang. This word is fake. It has always conveyed the suggestion of an attempt to deceive.

"Are you going to get up new scenery for the new play?" might be asked, and the answer would be, "No, we shall fake it," meaning thereby that old scenery would be retouched and readjusted so as to have the appearance of new. From the stage the word passed to the newspapers, and a fake is a story invented, not founded on fact—"made out of whole cloth," as the stump speakers say.

Mr. Howells, always bold in using new words, accepts fake as good enough for him and prints it in "The Quality of Mercy" without the stigma of italics or quotation marks. Just as in the same story he has adopted the colloquial electrics for electric lights—i. e., "He turned off the electrics." And hereafter the rest of us may use either fake or electrics with a clear conscience, either hiding ourselves behind Mr. Howells, who can always give a good account of himself when attacked, or else coming out into the open and asserting our own right to adopt either word because it is useful.

"Is it called for? Is it accordant with the analysis of the language? Is it offered or backed by good authority? These are the considerations by which general consent is won or repelled," so Professor Whitney tells us, "and general consent decides every case without appeal." It happens that Don Quixote preceded Professor Whitney in this exposition of the law, for when he was instructing Sancho Panza, then about to be appointed governor of an island, he used a Latinized form of a certain word which had become vulgar, explaining that "if some do not understand these terms it matters little, for custom will bring them into use in the course of time so that they will be readily understood. That is the way a language is enriched. Custom and the public are all powerful there." Sometimes the needful word which is thought to be too common for use is Latinized, as Don Quixote preferred, but more often it is ennobled without change, being simply lifted out from among its former low companions.—Scribner's.

The Saucy Magpie.

The sauciest creature alive is the magpie of Australia. He is also a handsome fellow, and as he flies in undulating waves he gleams beautifully in the sunlight. Glossy black and pure white are his colors. His beak is sharp and can be very cruel, although he belongs not to the carnivora.

I once owned a magpie of this ilk. I lost him with the deepest regret. Our friendship was of the most pleasant character. It is true that he often put me to some inconveniences. He robbed me, but not as man steals. He stole for fun. My cat hated him with fervor. He haunted her dreams. It was his habit when puss was asleep to seize her by the tail, give it a vicious tweak and then fly to the back of the chair, laughing heartily. She never caught him, and in time her tail became to her a tail of woe.

As I have said, he and I became fast friends. He visited me every morning, perched himself on the footrail of my bed and sang his merry song. Then he would come and get into bed with me. It was my custom to smooth his feathers, place him on his back beside me and pull the sheet over him up to his chin, so to speak. He would then close his eyes, and he and I would take a nap. I have known him to sleep in this position for two hours. This seems incredible, but I am not dealing in fiction. Since I lost him it has been my hope that he fell in with those who understood his character. Wherever he is, I wish him well, for I could have spared a better friend. —Donahoe's Magazine.

Signals at Sea.

The international code of signals was prepared and first published in April, 1857, in accordance with the views and recommendations of a committee appointed by the board of trade. The code is described as consisting of 18 flags—namely, one burgee, four pennants and 13 square flags, and in addition an "answering pennant," which is displayed when the message is completed and understood. The 18 flags represent the consonants of the alphabet, and it is by a combination of two, three or four of these flags hung perpendicularly to each other that arbitrary signs are made which represent words and sentences of the same signification in all languages. Each signal has throughout the code but one signification. A signal is always made in "one hoist" in one place.

The nature of the signals is indicated by the number of flags hoisted, whether two, three or four together. Signals of two flags relate to danger or distress; signals of three flags to general subjects of inquiry or communication, including latitude, longitude and time signals, and signals with four flags relate to names. Single flags are not used in code signals, with the exception of "yes" and "no" and "answering" pennants. The flags to be hoisted at one time never exceed four. It is an interesting mathematical fact that, with 18 variously colored flags, and never using more than four at a time, no fewer than 78,642 distinct signals can be given.—Pearson's Weekly.

A Novel Parrot For Sale.

A novel parrot, possessing, according to the advertisement, powers of mimicry and a vocabulary of 50 words, is for sale in London, but no gentlemen need apply. The precocious fowl is destined to pass into the keeping of a woman or never to change its owner. Why? Well, James Payn suggests that the bird may have hung in a drawing room where for a long time it has listened to the after dinner talk of the ladies, who now fear a betrayal of their secrets.—London Letter.

IT IS A USELESS GIFT.

THE VERMIFORM APPENDIX CAUSES SERIOUS TROUBLE.

Science Advances to the Rescue and Shows the Only Way to Safety—A Possibility That the Coming Man Will Be Without That Dangerous Organ.

Will the coming man have a vermiform appendix? Who has not heard of that troublesome little pouch in the abdominal regions which serves no good purpose, but is responsible for thousands of deaths each year?

Emmons Blaine, Senator Hagan and hundreds of other persons of prominence had trouble with the vermiform appendix—and they died.

Now science is asking in all seriousness whether the vermiform appendix shall be allowed to exist; whether it shall not be removed entirely before it has the opportunity to poison and destroy.

Professor B. G. Wilder has said flatly that children should be relieved of the vermiform appendix, just as they are vaccinated. But other students in this new field are not yet ready to pronounce in favor of so radical a scheme.

Physicians have known for centuries that the vermiform appendix existed, but it was not until 1888—not until five years ago—that any one of the profession had the daring to make an incision into the abdominal cavity and remove this rank offender against the laws of health.

The attack on the vermiform appendix is but five years old, but it is being prosecuted with remarkable vigor in New York city, where it originated, and the reason is not far to seek. It is simply because physicians feel sure that they have evidence that appendicitis, as disease of the vermiform appendix is named, causes more deaths every year than consumption, the long acknowledged chief among fatal diseases.

The appendix vermiformis in normal condition is about the size of a lead pencil and about 6 inches long. It is very well shown in a specimen which was removed at a clinical lecture at the Postgraduate Medical school on Jan. 13.

This appendix had ulcerated and increased in size somewhat, but gave a very fair idea of the part. When perfectly normal, it so compares with an ordinary lead pencil that it is most frequently described as like it. It is a pencil that writes only death warrants.

Even today very few physicians outside of New York city have any accurate knowledge of appendicitis or would undertake an operation for the removal of the appendix. So entirely is the discovery of the disease and the proper method of treating it an American development of knowledge and practice that among scientists of other countries today appendicitis is known as "the American disease."

Since the recent discoveries removals of the cause of all the trouble have been very frequent. One general practitioner has had 43 such cases within a year.

Speaking in the light of recent research, it seems safe to say that appendicitis is far more prevalent than consumption, and in just that proportion causes more deaths, the chief difference being that the cause or seat of appendicitis may be removed bodily with success in most cases, and success means restoration to perfect health.

The removal of the vermiform appendix in the early stages of an attack of appendicitis is now held to be one of the safest of surgical operations, while such an operation, when the case has come to near its last and fatal stage, is one of the most desperate. The sad case of Senator Hagan is one in point. He had long desired an operation, but it had been delayed until too late for an assured success.

And now, after all these facts are recited, recurs the question of whether the coming man will have a vermiform appendix. It is not meant by this to inquire whether the coming man will have his appendix slain lest it slay him. A much wider question is indicated. The number of appendixes removed in this city since the discovery that such an operation could be safely performed is very great, all things considered. One general practitioner, not a surgical specialist, told the representative of The World that he had removed 100 appendixes in two years. Possibly 1,000 appendixes have been removed since the first operation of this sort in 1888, and most of these in the past three years.

What follows? If such a rate is to be maintained, there will soon be a very large proportion of the people of New York city who have eliminated their vermiform appendixes, and we are glad of it.

Will the children of these people be likewise possessed of vermiform appendixes? Undoubtedly. But should the eliminating process be continued for a few generations, how long would it be before this useless and dangerous, degenerate and rudimentary portion of the body is permanently bred out of existence?—New York World.

A Clock That Registers the Tide.

The chamber of commerce of Rouen has erected a clock tower which gives the time on three sides and the height of the tide on the fourth, namely, that fronting the harbor. The tide indicator consists essentially of a float, which, by means of a cord and counter weight hung on a drum, actuates a series of shafts with bevel wheel gearing and moves a hand or pointer on a dial like that of a clock, marked with the necessary figures to show the level of the tide. The dials are of opal glass and are illuminated at night. The clock has an apparatus for distributing the time to other clocks in Rouen and also for unifying the time after the method adopted in Paris.—London Globe.

A Siamese Statue of Buddha.

The reclining statue of Buddha in the Temple of the Sleeping Idol at Bangkok is 160 feet long, made of brick and covered with gold. The soles of the feet are 16 feet long and are inlaid with mother of pearl in designs representing flowers and fruits.—Philadelphia Press.

COLONEL PHILLIPS' SPECTACLES.

Story of Their Use as Related by the Big Hairy Man From the Prairies.

"The way you Chicago people look at things reminds me of my old friend, Colonel John Phillips."

The speaker was a large, hairy man, with a big slouch hat and a voice evidently better adapted to the acoustic properties of the prairie than the smoking room. He appeared to realize this as he glanced around and saw every man in the room looking toward him, some smiling, some scowling.

"Tell us about your friend, the colonel," suggested a real estate agent who had the hairy giant on the string for a big cash trade.

"Why," continued the big man with the prairie voice, "Phillips saw everything that belonged to him big and everything belonging to me small"——

"That's human nature—" the agent was suggesting, but the prairie man interrupted with:

"No, 'twan't no human nature. 'Twas spectacles! He got 'em made in this town. I believe you people all wear 'em too."

"What peculiar properties did your friend's spectacles possess?" asked a curious listener.

"Just as I've said. They made his property loom up in regular Chicago World's fair fashion, but squashed other people's stuff worse'n a Zimri Dwiggins bank"——

"How could he do this?"

"Why, the blamed lenses worked on an axis and showed things telescope fashion, you know. S'pose there was a horse trade up; he'd let you look at your own horse through the ordinary little end of his glasses, but when you came to look at his he'd get at his specks again under some pretext—just flipping 'em over the magnifying way—and you'd see a magnificent animal. It was the same way with houses, tracts of land, wheatfields, changing money—anything. Once you looked through his glasses at anything, you were his victim, for you felt as if you couldn't live until you'd traded just as Phillips wanted you to. But he met his reward. He tried a bluff game on big Buffalo Jones of Arizona, to whom he had by that spectacled jugglery sold 100 jackass rabbits for burrows, and looked at big Jones' six gun through the little end of his glasses, trying to put him down small, you know. But, alas, it didn't work!"

"What happened?" asked the agent.

"Big Jones' gun went off repeatedly just as Colonel Phillips was adjusting his glasses. It was as well perhaps," continued the prairie man, dropping his voice so low that the bellowing of tugs in the river and lake could again be heard, "for my friend had acquired such a habit of trying to talk up to the magnifying side of these glasses that his long enjoyed reputation for veracity was entirely spoiled. We buried him at Big Jones' expense, and to prevent a recurrence of such a tragedy I took possession of the spectacles, and"——

"Whatever became of them?" asked a hungry looking man who had gone broke on a World's fair hotel scheme.

"I now wear 'em myself," said the big, hairy prairie man.—Chicago Tribune.

This Frog Weighed a Ton.

The labyrinthodon, a huge creature resembling a toad or a frog, and which lived in the earlier periods of our planet's history, has been found in a surprising state of preservation in the marl beds of Huezelweitz, Hungary. All species of this gigantic frog are now extinct and are known to the naturalists only through the investigations of the geologists, who have often found parts or entire fossils of the monster in strata of the triassic portion of the mesozoic period. Southwick mentions it in a three line entry in his "Quizzism and Key," under the head "A Frog as Large as an Ox," and in Barnett's "Geological Epochs" it is considered in a chapter on "Huge Froglike Creatures of the Mesozoic Age."

The specimen unearthed in the Hungarian marl bed is entire with the exception of the left forearm and the lower jaw. The skull measures 18 inches between the eye sockets and weighs, exclusive of the missing underjaw, 312 pounds. The bones which have been discovered up to date (and there is still hopes of finding the missing parts), with the adhering matrix, weigh 1,860 pounds, almost a ton.—St. Louis Republic.

The Jury Suited the Lawyer.

A Chicago attorney, somewhat noted for his sharp practice, sent his client one day to watch the case. Word came to him that his case was next on the docket, and he hurried over to find the opposing counsel already beginning. In vain he looked for his client. He was nowhere to be seen. In vain he asked for delay, but the court told him that the carelessness of a client would not allow such a thing. At last he glanced into the jury box and saw his client there.

The stupid man had thought he heard his name called and had marched in with the rest. The opposing counsel was so anxious to hurry the case along that he neglected to examine the jury. Seeing the thing was in his own hands, the Chicago attorney turned to the court. "I withdraw all objection," he said. "I have my client where I want him."—Green Bag.

No Bogus Italian Counts.

American heiresses need have little fear of bogus Italian counts for the same reason that there is no imitation Italian wine—the real article is too cheap. The possession of a title in Palermo gives nothing great of itself, but its indispensable accompaniment is a carriage, horses and driver in livery. To maintain these on an income of next to nothing a year it is often necessary to eat macaroni and thick soup for a regular diet, do a great part of one's housework in gloomy, faded apartments and sit about in old clothes all day long to await the magic hour of 3 p. m. Then mother and daughter don their finery, the carriage is driven to the door and it begins—the long, ceremonious drive to La Favorita and the Giardino Inglese.—Stirling Heilig's Letter.

IN THE METROPOLIS.

CITIZENS OF NEW YORK MAKING PLANS FOR THE FUTURE.

Improvements on a Gigantic Scale Projected—Hundreds of Millions of Dollars to Be Spent In Beautifying the Chief City of the Continent.

Much has been said from time to time of the absence of public spirit, of local pride and of neighborhood feeling in New York. Even the men who have made great fortunes here do not seem to have any regard for the city that has given them their opportunities for achieving wealth. "Men do not understand the causes of their success," said a speaker of the board of trade recently in commenting upon the difficulty in arousing public interest here in the movement for the improvement of the Erie canal, on which so much of the prosperity of the city depends. The lack of public spirit was signally illustrated in the half hearted way in which the business men entered into the movement to secure the World's fair for New York. Chicago was a blaze of enthusiasm on the subject, but New York entered into the competition in a listless, don't care sort of way, which naturally resulted in Chicago carrying off the prize.

The fact is that New York is a city of markets, of ships, of shops, of hotels and of tenement houses, but not of homes. The rich men may have mansions here, but their homes are in their country houses. The people who live in flats and tenement houses are engaged in a struggle for a bare existence, and have not the time or disposition to give much thought or care for the city. The diversity of races and languages represented in the population serves only to separate the people more and make them regard the city with utter indifference.

But there is reason for believing that this state of things is gradually growing better. There are evidences of increased public spirit, of a greater pride in the city and of a larger interest in her development and improvement. Great schemes of public improvement have been projected or begun. Millions have recently been expended in the acquisition of new parks, and twice lately when it was proposed to do something that would injure Central park there was an exhibition of aroused public opinion that prevented the outrages and would have done credit to a much smaller but more enthusiastic city.

Rich men are now contributing a liberal portion of their wealth to enterprises that will increase the glory of the metropolis. Columbia college is being rapidly developed into a great university. A magnificent cathedral has been started. A spacious botanical garden is to be established. A fine aquarium is to take the place of Castle Garden on the Battery. A splendid speedway for horses is to be built. The city is to erect an immense municipal building, which it is proposed shall be a notable architectural addition to the metropolis. The present city hall is to be given to the trustees of the Tilden trust and made the home of a $2,000,000 library.

The art and natural history museums are being rapidly developed and will soon take rank among the best in the world. Monuments and statues are being multiplied, and eight years after his death the $500,000 tomb of General Grant is approaching completion.

But in other and perhaps more interesting ways is the revival of public spirit in New York being manifested. Business men are showing an increased interest in the good government of the city and in its improvement in little things as well as great. Other cities might indeed copy with advantage some of the methods of the organizations that have been formed here for the public weal.

The City Improvement society has been formed and has started out to investigate the various complaints of citizens and to secure, if possible, better pavements, better street cleaning and similar improvements in parks, bridges and streets of the city. Lately a municipal art society has been organized by leading artists, architects and others, with a view of making the city more beautiful. They seek to improve the architecture of the public buildings, to secure artistic decoration within them and to prevent the erection of inferior statues and other inartistic structures. Another society is engaged in marking with bronze tablets the places of historical interest. Others of a more philanthropical nature are endeavoring to better the lives and condition of the tenement house population.

The women have organized a health protective association, and are endeavoring to institute reforms that shall decrease the death rate and make New York a better city to live in. The latest reform which they have taken up is that of securing a health regulation requiring the removal of the refuse of the 60,000 horses in the city of New York. The physicians comprising the Academy of Medicine have lately been acting with vigor and courage to secure improved quarantine protection and a purified water supply. The chamber of commerce and the board of trade—the mouthpieces of the merchants and bankers—have lately exhibited increased activity and exercised a wider influence. All these things certainly indicate that New Yorkers are beginning to wake up and to show a livelier interest in the welfare of the city.

Perhaps the fact that other cities are getting closer to her in the competition for business has something to do with this. It is beginning to dawn upon her citizens that unless she can unite with Brooklyn, bridge and tunnel the North river, throw more bridges over the East river, get rapid transit from city hall to Westchester county and institute other measures of public improvement, she is liable to lose her commercial supremacy. —New York Cor. Baltimore Sun.

Many of the South Sea islanders believe that paradise can be inherited only by persons of perfect physical forms. Where this belief prevails a man will die rather than submit to amputation.

A WOMAN OF NOTE.

One of the Most Active Promoters of University Extension.

One of the active promoters of university extension work is Mrs. Louisa Reed Stowell, wife of Professor Charles H. Stowell, M. D., of the University of Michigan. Her interest in university extension arises chiefly from her desire to help young women get a higher education.

Mrs. Stowell has made a reputation as a scientist and author and for several years edited The Microscope. She is the author of a work on miscroscopical diagnosis. Mrs. Stowell was born in

MRS. LOUISA REED STOWELL.

Grand Rapids in 1850. Her father, S. Reed, was a clergyman. She graduated at the Michigan university in 1876 with the degree of B. S. She pursued the post graduate course one year and in 1877 received the degree of M. S. When she had completed her studies, she was engaged as instructor in microscopical botany and given charge of the botanical laboratory. She remained in that position 12 years, and both teacher and pupils accomplished an unusual amount of work in structural botany during the period.

Mrs. Stowell is a member of the Royal Microscopical society of London and has been at the head of the college alumnæ associations at home. She has contributed extensively to scientific literature and also to popular periodicals. She is an artist in crayon, charcoal and pen and ink sketches and illustrates her own articles.

EDINE HOWARD.

WHAT TO TAKE TO COLLEGE.

What the Young Lady Student Should Procure For Her Room.

College rooms, if furnished, contain merely carpets and necessary furniture. Otherwise they are bare and unhomelike. The wise student will take things to change it at once. All sorts of pretty stuffs used for drapery and upholstery will come in play at college. They will be needed for table and bureau covers—unless regular ones are taken—for window hangings and curtains to conceal the paucity of volumes on a large set of book shelves. They will help cover the walls if the supply of pictures be small or the pictures themselves are not large. Some of the stuffs may be used with cotton wadding to upholster a flat topped trunk or to make pads and cushions for chairs.

A steamer chair is a great comfort at college. So also are great square floor pillows. Take squares of cretonne sewed around three sides and when nicely settled have them stuffed with straw or excelsior if you cannot afford feathers. They help make delightful "cozy corners" on the floor or bed. This last, if a single bed, can be transformed into a luxurious couch by being covered by day with some of the same goods, and having these same pillows and smaller feather or down ones piled upon it. A round bolster stuffed with excelsior can be placed against the wall under the cover to fill in that disagreeable angle where all pillows get discouraged and double up when leaned on.

All sorts of pictures and plaque holders will be welcome in the college room, also a plentiful supply of picture hooks. A paper of tacks, hammer, screwdriver and gimlet will be very useful in upholstering trunks and boxes for couches and hassocks.

A few dishes, such as fruit plates, a tumbler, medicine glass, spoons and a knife and fork, will come in very well at times.

Any number of flower glasses and jars will be serviceable to hold the "spoils of the forest and field" that the college girl always loves to collect. Perhaps there may be a broad window seat which will hold a pet palm in its fancy pot. An easel, too, if it can be safely sent, helps to fill up a room. All one's favorite books ought to go.

A couple of washing bags, made of gingham or calico, with draw strings, will hold soiled clothing, one being kept in the room while the other is in the laundry with the week's wash. A bottle of indelible ink ought not to be forgotten, also a traveler's inkstand, to be taken when you want to write in some charming nook out of doors. Window poles for your pretty curtains are not always obtainable without a little trouble and can be sent strapped up with the umbrellas. A case for those same umbrellas will be a good thing to carry also.

A writing tablet or a portfolio will help to fill the table and make it look scholarly and any sort of a good sized screen will always be found invaluable, especially if two students occupy one room. It will serve to make the one room into two when each student wishes to study alone.

ANNIE ISABEL WILLIS.

Women and Music.

The convention of amateur musical clubs at Chicago revealed the existence of a great number of ladies' musical clubs. No less than 34 of such clubs took part in the programme of the convention. Nothing can be more delightful, more æsthetic or improving, than a musical club made up of gentle, refined, enthusiastic ladies.

THE SPECTROSCOPE.

IT PROMISES TO REVEAL WONDERFUL STAR SECRETS.

A Modern Astronomical Instrument That May Teach Observers Something Relating to the Composition of the Heavenly Bodies.

The corps of astronomers at the observatory on Mount Hamilton are now completing the results of Professor Schaeberle's observation of the great eclipse of the sun observed in Peru, speculating on that wonderful heavenly visitant, the comet; studying the "bright line" stars, and other matters incidental to the work of this, the greatest observatory of the world.

It has never been definitely known of what comets were composed, but Professor Campbell has been observing the recent additions to the firmament at all favorable opportunities with the big telescope and its spectrum attachment. The result of his observation has been that the spectrum lines show that the comet is composed of incandescent carbon and nitrogen, being itself luminous. This has been the theory heretofore, but it had never before been actually determined. The spectrum revealed the hitherto suspected truth. While the astronomers are satisfied with the observations of this comet, yet much is still in doubt, and will not be solved until some big comet appears, such as has presented itself in past years before the present means of observation were known. If such a comet should heave in sight all other work would be suspended, and all eyes turned upon it, resulting undoubtedly in astonishing and almost unhoped for results.

Professor Campbell at present is devoting most of his time and attention to the study of the "bright line" stars, training the great lens upon them night after night. His work is greatly aided by the spectroscope. Of these stars there are only 32 in this hemisphere capable of being observed, the remainder, about 19 in number, being in the southern hemisphere, and not visible at the Lick. When the spectrum is placed on the telescope, and the lens trained upon one of these stars, the light from the star is broken up and analyzed by the spectrum, and the colors obtained arranged in a broad band according to their intensity. Intersecting this band are bright lines, whence these stars receive their name. The lines, according to their position among the colors, denote a preponderating abundance of some element, one position indicating hydrogen, another tin, another iron, and so through the list of elements. In some of these stars the number of bright lines is much greater than in others, and this shows that the stars are in different stages of development.

From these observations Professor Campbell hopes to perfect a definite theory in regard to sidereal evolution, which will show whether the star is a new one or one partly burned out or one entirely dead. All observations hitherto have been made with comparatively small telescopes, and but few lines were brought out in any of the spectra, but when the 36 inch lens, with its wonderful power, was turned upon them many new bright lines were brought out, revealing the fact that the state of the stars was far different from what was supposed. Continued observations will be made upon these stars, and many new and interesting facts may soon be discovered.

A very interesting object of observation has been the new star in the constellation of Auriga, called Nova Auriga, discovered on Nov. 1, 1892, by Professor Andrews of the Edinburgh observatory. When first discovered, this star was of the fifth magnitude and was visible to the naked eye. It remained in this state for six weeks. It then decreased in intensity and was visible only in the large telescope for a period of six weeks more, when it totally disappeared. In August it again appeared, having increased to the tenth magnitude, and it has remained in sight ever since, increasing in brilliancy and commanding great attention in all the observatories of the world. It is now supposed to be in the first stage of sidereal evolution. In the past 20 centuries only 20 of these new stars have been discovered, and the extreme rareness of their appearance adds greatly to the interest in them.

The most important question in regard to Nova Auriga was the nature of it. Here and at Pultowa, Russia, where the second largest telescope in the world is located, the lens being 30 inches in diameter, the observation tended to show that it was a planetary nebulæ or a nebulous star, but this theory has been denied by leading English and German astronomers, who have claimed that it was a true star. Recent observations at Mount Hamilton disprove the theory of its being a true star, and establish the fact that it is a nebulous body. The spectrum exhibited exactly the same features as the spectrum of those stars which are admitted to be nebulæ.

Without doubt the spectrum has proved to be the most valuable scientific aid to astronomers of all discovered in recent years. While it has been in use for nearly 20 years, yet it has been only in the last five years that it has proved to be of much value. It is now used both visually and photographically. The Lick observatory will soon be furnished with a new spectroscope of the latest and best manufacture, D. O. Mills having given a sum of money sufficient to purchase such a one as is needed.—San Jose Cor. San Francisco Chronicle.

The Gather-no-moss Young Man.

Young men who are "everything by turns and nothing long" may possess even more than average ability, but they never make good business men. As "rolling stones gather no moss," neither do these shifty creatures add any power to their character or wealth to a store. They are respectable tramps, always on the move from one vocation to another, often waiting like Micawber for "something to turn up."—Dry Goods Economist.