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"THE SPINDLE": JEAN FRANÇOIS MILLET, PAINTER

THE CRAFTSMAN

VOLUME XIV JULY, 1908 NUMBER 4

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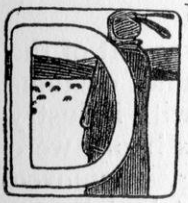
THE CRAFTSMAN

GUSTAV STICKLEY, EDITOR AND PUBLISHER
VOLUME XIV JULY, 1908 NUMBER 4

MILLET'S PEASANT LIFE AS A BOY: ITS INFLUENCE ON HIS ART: TOLD FROM NOTES OF THE LATE WYATT EATON, HIS FRIEND AND PUPIL: BY CHARLOTTE EATON



URING the winters from eighteen seventy-two to eighteen seventy-four, while studying in the schools of Paris, the late Wyatt Eaton made occasional trips to Barbizon, where through frequent meetings in the forest or the fields he formed an acquaintance with Jean François Millet's eldest son, François. This acquaintance ripening into friendship led to his meeting the father, for whom he had already conceived the most unbounded admiration, although his knowledge of Millet's work was limited to a few reproductions he had seen in America and some woodcuts seen in the window of an old print shop on the Rue Bonaparte, which on his way to the Beaux Arts he often stopped to admire.

Speaking of his early days at Barbizon and of his first acquaintance with Millet's later and completed works, in some unpublished notes he says:

"The spirit, charm and power of Millet's art I had felt almost from the beginning, but the detail of his methods, his manner of approaching and using Nature, I did not begin to understand until years after."

From the first Mr. Eaton took an active interest in the family who regarded him in turn almost as one of them, and he seems to have given some thought to the boyhood and early influences that impelled Millet to become an artist. In writing to a friend in New York at this time, he says:

"I feel the deepest interest in the early period of the life of Millet, for his last and most complete productions were the souvenirs of his boyhood, and the following after the impressions received from the harmonious but primitive nature that surrounded him."

And again, in some desultory notes which he intended to weld

together into a lecture to be delivered before the students at Cooper Union, Mr. Eaton says:

"The parental home, near the point of the Cape du Hague on the northern coast of France, is an isolated spot, wild, rugged and barren on the slope to the sea, but luxuriant in verdure and fertile pastures where, protected by the gentle slopes from the bleak winter winds, Millet endured, and enjoyed—we may safely say—the rude labor of the farm, until the age of twenty or twenty-one. Ever ready with his hands, he knew well how to swing the scythe or bind wheat into bundles equal to the most experienced worker. For generations the family had been known as peasants of the better class; that is, they tilled their own lands, and Millet's efforts in art were encouraged by his father—a man of rare qualities.

"Half a century ago, in this sequestered spot, little was felt of the excited marvelous world without; the rural habits and customs seemed to satisfy the people; their wants were few and with industry were gathered from the woods and pastures. Millet's books were few, but these were read with interest and understanding. Removed from all intercourse with the makers of pictures, he yet had before him some good examples of what had been done in pictorial art in the well illustrated family Bible, and an occasional journal from Paris told him of exhibitions and of living men who painted pictures.

"I delight," writes Mr. Eaton elsewhere in his notes, "in these early associations that gave Millet the artistic impulse and the distinguishing qualities of his art——"

MILLET kindly offered to criticize Mr. Eaton's work, and it can readily be understood how under these influences his work at the Beaux Arts should have been neglected, and how he practically took up his abode at Barbizon. He said, as if in apology for this neglect: "I worked under Gérôme to acquire facility in the use of the instrument, but I had at no time any thought of following his teaching."

Indeed, for academic exactness he had little respect, if attained at the expense of higher qualities. Jotted down in a pocket note book are these words:

"Accuracy in art, a desirable quality, but not a leading merit. It should be sought after by the student and artist as a matter of necessity, and achieved in thankfulness but not in triumph, and never at the expense of character or expression, although to attain accuracy one must often run the risk of losing some quality which is

worth more than the other—while the student at least must take this risk, let him understand that it is for his own discipline. Accuracy in art is like good spelling in literature, but it is more important with the artist, as his work cannot be corrected by another, whereas the proof reader can correct the author's spelling."

These reflections, written hastily down between the sketches of this little Barbizon note book, may represent those points in his conversations with Millet which he wished to impress on his memory.

The death of Millet in the winter of eighteen hundred and seventy-four was a severe blow to Mr. Eaton. He was in Paris when the news reached him. He at once started for Barbizon, and sought in every way possible to comfort the stricken family. In an article on Millet published in May, eighteen hundred and eighty-nine, he says: "I hastened to the house and found the family in the dining room, sitting silently in the house of death. I took my place among them, asking no questions. Millet's room was adjoining. There, too, was silence. I took François by the hand and together we went out. He told me that his father's only words were, 'All is over.' We left each other too much overcome for further speech. . . ."

Mr. Eaton became the close confidant of Mme. Millet in this early period of her widowhood. She discussed with him the details of many matters which gave her perplexity or pain. This will explain the following letter which Mr. Eaton wrote to Mr. Gilder, treating of the most intimate affairs of the family, as well as of its financial problems.

"Barbizon—par Chailley,
Scene et Marne.

"MY DEAR Gilder:—I wish to call your attention to certain facts regarding the Millet family in connection with the house in which they have always lived.

"Millet, on arriving at Barbizon with his wife and children in eighteen hundred and forty-nine, took a furnished room or two, but deciding to remain there for some time, they hired the house now occupied by the family. The small room on the street was at that time a sort of woodshed and was used by Millet for his studio. Many of his most famous pictures were painted in it, 'The Sower,' 'The Grafting,' etc. In the year fifty-four or fifty-five the present studio was built, and the shed was finished and made a part of the house, the dining room. I believe that it was after this that the house was bought by Monsieur Sensier—on time—and was paid for from the profits upon Millet's pictures given for the rent. The house and

studio is still owned by the Sensier estate. The lease now held by Madame Millet will expire very soon,—this year, if I remember rightly. The Sensiers own considerable adjacent property, and for some time it was the intention of the family upon the expiration of the present lease to pull down the house (which is a most picturesque and homelike building) and the early studio, leaving possibly the later studio which might serve for a lodge building to a château to be built in the field beside the garden, which was so often painted by Millet in his pictures. This plan if carried out would obliterate all of the most intimate associations of Millet's life at Barbizon. The present unsettled personal relations in the Sensier family make this plan less certain than it seemed a couple of years ago, but still the future of the house and grounds is ever uncertain.

"To say the least the Sensier family have not been amiable as landlords, refusing even to make repairs in a part of the house which was necessary to remove impending danger. For a new lease the rent will probably be increased to an amount which will make it impossible for the Millets to remain. The house will then be made over into a showy bourgeois style and rented to wealthy Parisians for July and August at two thousand francs per month.

"It is needless to say that all friends of Millet or his art are attached to the place. You know what a beautiful restful spot it is, all made by Millet's own hands or under his direction. The large elm tree growing by the stone stairs leading to the room above the studio was brought by Millet from the forest in a basket with wild plants by oversight, but set out with care and was much cherished by him, as it is a common tree of Normandy, and the love of the family for the place is all that might be imagined.

"The thought of having to leave the place has long been a sore trial for Madame Millet and the children. It was at one time the desire of Madame Millet to ask the government to buy the property and allow her to live there in place of the pension of two hundred and fifty dollars a year, but she was dissuaded by her friends, as without the pension she would find life very difficult—a home could be had for less rent than that. But this will show you how great is Madame Millet's desire to own the place.

"To have the house purchased by Millet's friends and to present it to Madame Millet and to the Millet family forever is the desire of all who have become acquainted with the circumstances—and not only for the associations of the place, but as a material aid to the Millet family.

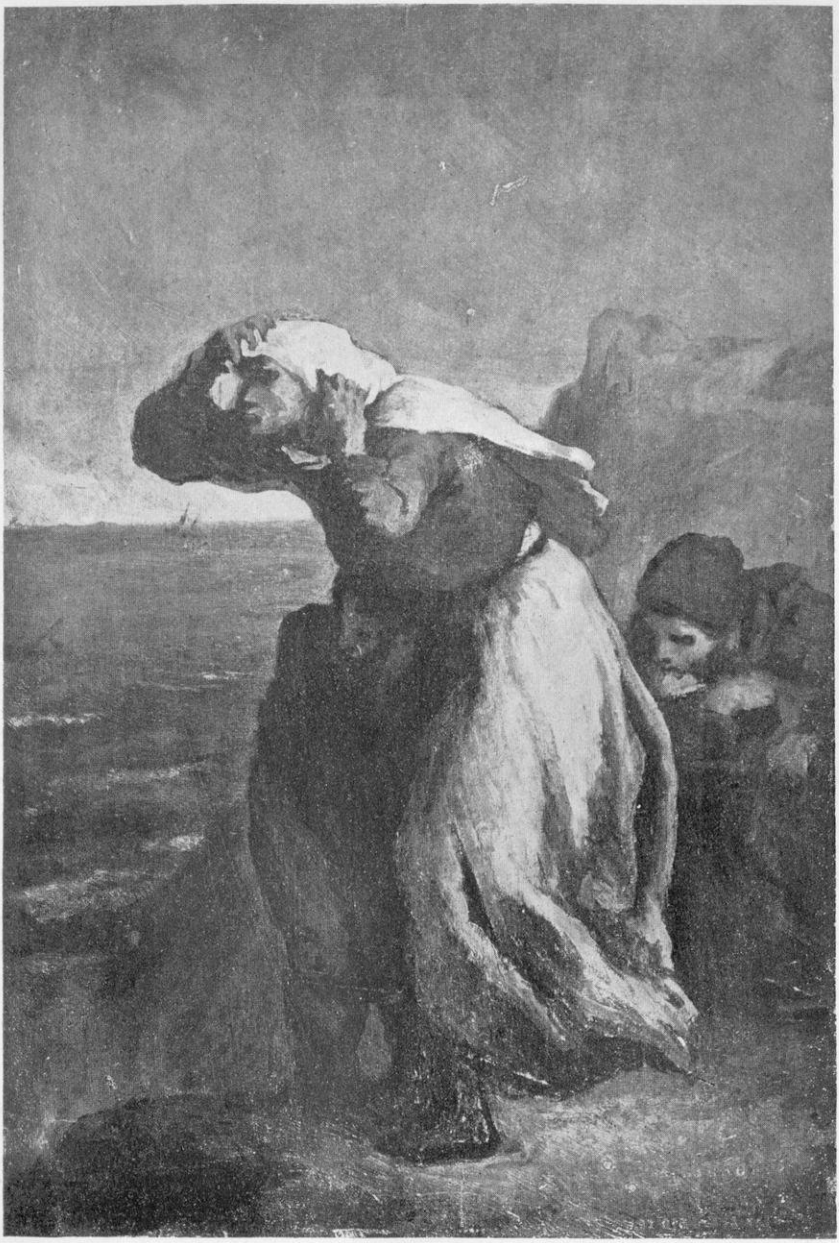
"THE SPINNER": JEAN FRANÇOIS MILLET, PAINTER

"THE SHEPHERD": JEAN FRANÇOIS MILLET, PAINTER

"THE WASHWOMAN": JEAN FRANÇOIS MILLET, PAINTER

"SHEEP SHEARING": JEAN FRANÇOIS MILLET, PAINTER

"CARDING WOOL": JEAN FRANÇOIS MILLET, PAINTER



"WATCHING FOR THE SHIP"
JEAN FRANÇOIS MILLET, PAINTER

"The capital realized from the sale of Millet's works after his death has been very much diminished by the education of a large family of children and grandchildren, dowries given to daughters in marriage, the purchase of exemption of one of the sons from the long service in the army, and large draughts made by one of the daughters who has a large family, much illness, etc. I speak of Madame Millet's affairs through knowledge coming from a most reliable source, as well as through my own intimacy with François.

"The actual income from the Millet estate a year ago was four thousand five hundred francs, add to this one thousand two hundred francs from the government during Madame Millet's lifetime, makes five thousand seven hundred francs, or one thousand four hundred dollars. Madame Millet's present family consists of two unmarried daughters, a son who has not yet completed his studies in architecture and a son in the army. The married daughter before mentioned and her children are almost entirely dependent upon Madame Millet for support. Madame Millet's income has never been sufficient for her needs, but by the sale of drawings, sketches and a few unfinished pictures which were not put into the sale, she has been able to get along, though often resorting to credit in the hope of avoiding the necessity of drawing upon her capital.

"Of sketches and drawings she now only has what have been left after many selections. A couple of years ago she made a very dignified appeal to the government for an increase of pension, and the government replied by making her a grant of a few hundred francs.

"I might add that Madame Millet and family live in the most simple manner, but her position as widow of Millet obliges certain forms which would not be necessary had her husband been less known. In the winter they occupy a small apartment high up and distantly located in Paris, but where at least she can be near her several married daughters and their children, and give her other daughters the opportunity of society that they would not have at Barbizon, but early spring and late autumn have always found them at their loved home." . . . .

That this was only the rough sketch of a letter that never reached Mr. Gilder is evident, for it breaks off at this point in the middle of a page, as if the hand of the writer had been arrested by illness or the arrival of unexpected visitors. Mr. Eaton made some reference to the matter in letters to one or two other friends in New York.

In eighteen hundred and eighty-nine Mr. Eaton again returned to France (this time accompanied by myself). We found the Millets

in their apartment in Paris, but sadly dwindled in number. The only daughter at home was Marianne, the youngest, who was then ailing and died soon after, and the only son at home was Charles, who spent little time with his mother.

Madame Millet herself looked pale and pensive, and wiped the tears from her eyes during the greetings and again while speaking of the old days at Barbizon and of those who had passed away.

I remember this day as a sad day in my life, for it was filled with the souvenirs and regrets of which I was no part. I think Madame Millet felt this for me, for turning suddenly to Mr. Eaton she remarked, sympathetically, "*Une jeune fille de dix-huit ans.*" I think perhaps it was the effect of this visit upon Mr. Eaton that kept him from going to Barbizon this year. He said to me, "The rooms at the Inn are so damp and chilly at this season." It was October and the weather was dark and dreary—but I think he feared the depressing thoughts that might fill him in seeing the place more than he did the dampness.

So he wrote to François, who responded by coming at once to Paris. We met at the Louvre and afterward lunched together at one of the Duval restaurants. This was a happy day. The joy of the meeting of the two friends communicated itself to me at once and remains with me now, a precious memory.

BY A FIRESIDE

A CHIMNEY wide, high leaping flames that twine
A glow of coals, blue-gray, ash-rose and white—
A memory, a breath of fragrant pine
And lo! a camp-fire and the starry night!

—Grace S. Hyde Trine.

A DOMINANT: A STORY: BY MARION HILL

TO PROLONG the pleasure of independent home-coming, the first she had ever tasted in a considerable lifetime, Malvina Leed paused upon her small doorstone to admire her two acres with lenient leisureliness before fitting the key into the lock.

"Not much of a farm," she commented in high good-humor while a glow of rosy content overrode the look of pale suppression habitual to her countenance. "But it's all mine!"

This last came in a furtive whisper, as if she had good reason for supposing she might not be permitted to exult long if she exulted too audibly.

"Nor much of a house, either!" This second damaging admission seemed to afford her a satisfaction even more rapturous than the first. She literally trembled with pleasure as she turned the key and pushed open the door. Key, door, house, all were new to her, and the entertainment of the moment was immense.

Her usually exacting nostrils sniffed enjoyingly even the lifelessness of the air which crept out to her,—that subtle atmosphere of barren unwelcome which exhales from an untenanted dwelling.

Just as she had mustered sufficient audacity to make a possessive entrance, her mature but childishly expectant face clouded with a panicky concern. "Joey told me most particular to do *something* with the key, and what it was I clean forget. 'Twas either to hang it on a nail—or slip it on my key-ring—or—he'll be *that* annoyed!"

Then, the frown of concern turned to a frown of protest, and it grew courageously till it obliterated completely her subservient attempts to recollect. This frown marked absolutely the first rebellion in all her rather harassed, and decidedly excitable, married life against the dictating precaution of her extremely executive husband. With a nod of defiance she let the key take chances and dropped it among the bewildering miscellany of a capacious pocket.

"Why should I not do what I like with my own key and in my own house, too?" she muttered, sternly. She felt that sternness was necessary. Her resoluteness needed severity in order to be operative.

"*My* house!" The unusual words brought a smile to her lips. "Only three rooms—*but all mine!*" Again the lowering of her voice as if there were danger in a too audible expression of content. "Mine, —like the land."

Mingling with this inconsequential exultation, but without any depreciating effect, Malvina had a common-sense knowledge that her "inheritance" was almost valueless viewed as real estate.

Subconsciously, this knowledge gave security to her enjoyment. If her property were not worth possessing, perhaps no one would bother to interfere with her management of it. "No One's" name was—Joey.

The tiny place had come to her not long ago through the death of a relative. It was at that time being used as a summer home by a young married couple who had now gone back to the city,—gone, as summer visitors generally do, at the most gorgeous season of the year, in rich October, red with turning woods and plenteous with garnered harvests.

"And, Mally, you'd better hurry there at once and see what you've reely got," had been Joey's dictum. So of course she had hurried. She allowed Joey to plan her life down to the most trivial detail, not that she was incapable of doing it as well and better, but that it infinitely saved trouble to let Joey run as far as possible all of the universe that was not directly under the hand of its Creator.

So patiently had she submitted herself, and for so many years, that sheer habit had kept her from realizing how impatient she was and always had been of his all-prevailing assertiveness. Nor until she stepped within this little kingdom of her three-roomed house did she discover how needlessly thorough he had been in his persistent thwarting of her harmless preferences.

"If there isn't a table in the *middle* of the sitting room!" she cried, and a flush of gratification intense enough to be pathetic in its inconsequent connection burned in her excited cheeks. "Now, isn't that cosy! Ma always had hers in the middle. Seems as if I never *could* see the use of a table up against a wall. It kind of wastes one side of it. I'm *so* glad the table's in the middle!"

In Joey's house—and hers,—if she could ever bring herself to feel ownership in anything so aggressively controlled by her partner,—nothing was ever in the middle of a room. Joey was large of bulk and resistlessly progressive and during progressions objected to hitting projecting portions of his anatomy against corners of furniture. He therefore arranged his belongings inexorably close to his walls, keeping his rooms as unobstructed at center as fighting rings,—which they often were.

Malvina walked around and around her table in ecstasy, gathering additional comfort from the fact that it was covered with a fringed cloth. Tablecloths irked Joey considerably, being in the way of free distribution of ashes from his pipe, and *fringed* tablecloths were

utterly tabooed, fringe having aptitude to entangle in Joey's buttons with disastrous outcome as concerned Joey's temper.

Weaning herself from the table, Malvina went to the window, ran up the shade, raised the sash, gleefully surveyed her scant acres from this new vantage and gloried in her sole big apple tree just discovered at the back.

"Cayuga reds!" she murmured, and her calm blue eyes grew wistfully eager. She mourned because the apples were out of reach. She ached to handle one, hers, off her farm. Just here the muslin curtain blew against her cheek and awoke a new train of rapturous sensations.

"*Sash curtains!*" she cried with another flush of exceeding pleasure as she ran a welcoming hand up and down their starchy smoothness. Joey was not sympathetic in the direction of sash curtains, holding that they harbored dust and obstructed the light, and he invariably emphasized his theories by twisting into unsightly ropes or rolling into damaged wads such curtains as Malvina ventured upon from time to time.

"Have the other rooms sash curtains, too?" wondered Malvina, letting her expectations broaden audaciously.

Exploration happily proved that her hopes had not betrayed her. Both kitchen and bedroom were whitely curtained and the curtains moved gently in the draft as if they were sentient things and waved their friendliness toward her. The bedroom appealed strangely,—it beckoned like a sanctuary,—so quiet and dim it was, so spotless and unlittered, so free from pipes and boots and whip-thongs and earth-stained overalls. Except for the bureau and the bedstead, the small room contained nothing but a rocking chair and a table only large enough to hold a reading lamp and a book, yet the apartment seemed spaciousness itself to Malvina. It was as wide as—freedom.

She stole from it reluctantly, wooed away only by the magnitude of her interest in her possible kitchen ware. Those utensils were few, but eminently satisfying in their state of newness and cleanliness.

"Brides is the least messy people to live after as ever I see," admitted Malvina, as she entrusted to the glass cupboard the wisp of tea, the loaf of bread and the pat of butter which she had thriftily brought with her to serve as supper and breakfast. Her proposed stay overnight was practically enforced, for the return trains were inconvenient in hour, one being too early in the morning, the other too late at night, to permit of her finishing her appraising trip within the day.

Incontinently, she set to work and kindled a fire in the stove long before she had any need of it. She really could not put off till its conventional hour the pleasure of lighting this fire, her first in her own home. The simple act was to her symbolical of very much more than she could put into words. The first leaping of the cheery flame, followed by its steadier glow, filled her with a sort of mysterious awe, an unguessed heritage through the ages from savage ancestry when the kindling of a hearth fire was a significant act in the ritual of possession and dominion. "Her" fire,—that is what exalted it out of the commonplace. Moreover, a fire is the best of company. Under its hearty crackling, the little house was as if filled with guests.

"Now, I'll have a good look around at the outsides," declared Malvina, nodding a temporary farewell to the cheeriness within.

She found that the kitchen garden had October written ruthlessly all over it. The one or two remaining tomatoes were dark and mushy from a recent frost; the corn rustled in yellow spoliation; the potato hills were merely hollows and empty at that; the bean poles supported but leafless strings of stem from which the podded wealth had long been stripped; nothing remained but a few tough squash and a head or two of rabbit-nibbled cabbage; but Malvina saw it with the eye of optimistic futurity, green in the sprouting rows of spring, *next* spring, when she herself would plant it according to her own desires, not with Joey's cast-iron precision. It was the goodliest patch of garden she had ever seen.

She pulled a leathery leaf from the seeded lettuce and chewed it with meditative gusto.

"What kind, I wonder?" she ruminated. "It's the best I ever eat." She was tasting more than lettuce; it was the improving savor of ownership which gave to every mouthful its unique superiority,—ownership not valued because it meant personal aggrandizement but because it permitted the unfettering of a soul. On Joey's farm even so infinitesimal a trifle as a bite at a leaf of lettuce might not always chance to pass without belittling comment,—was she taking to rabbit feed for a change? perhaps she liked dirt, *he* preferred lettuce washed! —had he slackened up any on provisioning lately? if so, he'd go to town and 'tend to it. Joey's fleers generally masqueraded as jokes, but each held its intentioned sting. Malvina mildly made up her mind that the jokes prevailing on her own two acres should be of her own manufacture, or approximating that brand.

From the comfortable environment of her barren inheritance, she gazed with unenvious curiosity at the wooded estates of her neighbors,

whose angle of roof or curl of smoke showed sociably above the branching of distant orchards.

"I b'lieve I'll run over to one and see if I can't buy a pint of milk," she murmured, advancing perfidious reason, for she preferred her tea clear.

Possessing herself of the gayest of all the seemly little jugs in the glass-doored dresser she ambled her contented way through fields and lanes till she reached the farmhouse of her selection.

The protests of a barking dog had heralded her approach, and a woman was in readiness upon the back porch to greet Malvina before she had need to knock. The woman eyed her with stern caution, not unkindly, but with the shrewd appraisement of countryfolk.

"What do you want?" she asked with unadorned directness. She examined the milk pitcher, aloofly critical, and without admitting that it carried any suggestion.

Striving to conceal her pride in being a neighbor and a landowner, Malvina joyously sketched her milkless condition and wound up with,

"So I jus' run over to ask if you had any,—to sell."

"Well, I d'know," said the woman doubtfully. "I'll see."

It seems to be a point of etiquette with a farmwife never to express any certainty of knowledge concerning her possession of a drop of milk, a shred of butter or a single egg. She always has to "see." But before disappearing for the purpose this woman unhesitatingly appropriated Malvina's pitcher and soon returned with it filled.

"Oh, thank you very much," said Malvina, pleasantly, hastening to brush away the steely disapprobation gathering on the other's face by hurriedly adding, "and what's the price of it?"

"Well, I d'know," said the woman, again firmly intrenching herself behind doubt, though the quoted price of milk per quart as given by the weekly paper from town all but leaped from her eye in order to attack Malvina should the latter tender a cent short.

"Five cents?" offered Malvina, risking nothing, for she knew.

"Well, all right," was the woman's acceptance, still intoned doubtfully.

Malvina began to back away. The strange woman was one quivering question mark from head to foot, but she kept her lips sealed. She, too, much wanted to know. It is only your woman who really does not care who makes the most persistent questioner. Malvina comprehendingly helped out a little more.

"Any time you're short of something, come and see if I mebbe haven't it, over yonder, to Malvina Leed's! Good evenin'."

She turned and retraced her way. "To Malvina Leed's!" How the music of the expression sang in her ears and in her happy heart! Everything had been "Joey Leed's" for so carpingly long that she had grown to connect the title only with things annoying and unrestful. The content of her surroundings grew with each atom of experience. Besides a farm, she now had a neighbor and a good one. For Malvina was not deterred by that neighbor's exterior from detecting the warm womanliness within. This cold bargainer, cautious about squandering her friendship, her dignity, her reserve, her provisions, was just of the sterling strength to be of help in time of need. The frank and open eye above a chary tongue,—that tells a reassuring tale.

"Who babbles her sympathy, dribbles it," philosophized Malvina. "*She's* all right. If I was took sick tonight, she'd be over in the shake of a calf's tail—with somethin' hot."

She almost wished to be taken sick,—for the joy of the companionship. Joey had been a discourager of neighborliness. "Don't want nobody's old hens cackling 'round my roost," was his defense, persistently jocose, but unfailingly selfish. Malvina dashed away this reminiscence with a happy jerk of her head; this was not Joey Leed's, but Malvina's.

She had regained her own doorstep. The brief October day, vanishing without a warning twilight, had given place to cool crisp evening which would soon be night.

Either driven from its hiding place by cold or hunger, or wooed out by the security of darkness and an uncanny awareness of milk, a thin but amiable kitten arched and purred on the doorstone.

"The trollop!" said Malvina, scourgingly, referring not to the kitten but to the erstwhile unmessy bride. "Too sweet-hearted to give you a merciful drowning, kitty, but able to leave you to freeze and starve! I know the kind! There's a-plenty of them. And they're all city-folk and ought to know better. Come in."

Frenziedly appreciative of the invitation, the kitten made a contorted entrance, squeezing into slim retreats, making immediate reappearance, arching with nervous suddenness, treading on hot eggs and purring royally.

"I kind of like a kitten," mused Malvina, pensively pouring it out some milk. "Ma most generally let us keep one, though she talked a heap."

Joey never talked. He acted. He said he wanted animals kept in their "right place." From evidence, this place was wherever it was unseen of Joey.

After rebuilding the fire and setting the kettle to boil, Malvina indulged in a long-suppressed instinct for illumination, trimming three lamps and letting one burn at its brightest in every room, so that the tiny domicile fairly shone with light.

This audacity incited her to a greater.

"Sheets!" she announced with triumph, and dressed the bed accordingly. Joey was hygienic to violence in his denunciation of sheets, insisting the year round upon blankets.

"No eating in the kitchen!" she continued firmly, setting her tea table in the sitting room. "Not even a *sight* of the kitchen!" and she drew the turkey-red portière across the door.

"*Thin* toast!" was her next order which she proceeded to execute with a deliberate unconcern of time which was in itself a rare happiness. In the house of Joey things were generally kept jumping by the clock.

Her happiness augmented when she heard the distant shriek of the approaching passenger train,—the one which she might have taken but did not, preferring to arrive at a new destination by daylight,—what hours of enjoyment she had gained by deciding not to come on it!

Before sitting down to her pretty tea-table, she went into the bedroom and "did over" her hair in front of the mirror framed in pine cones, and she noted with joy that traces of past comeliness had crept back to her face by reason of relaxation and content.

"This little home is goin' to be my soul's sanitarium!" she vowed aloud. The startled kitten gave a big purr. Lifting the flattered animal to her cheek, Malvina passed back into the kitchen and sat a blissful moment to enjoy the tranquillity of her surroundings, the grateful glow of the quiet fire, the inviting brightness of the rooms, the serene and confiding snuggle of the cat against her neck, the uninvaded solace of a silence which was not loneliness, of solitude which was not sorrow.

A sudden stumbling upon her doorstone, a man's muttered imprecation at his own misstep, did not arouse a particle of fear within her; she was too proudly anxious to play the hostess if only to a mistaken wayfarer. She hospitably stood, even before he should knock.

But no knock came. The knob was boisterously turned and the door banged open for the volcanically jocose entrance of Joey.

"Ah ha! nothing like coming unbeknownst to find what's going on!" he chuckled, uproariously, slamming the door behind him and lunging into the room. The tiny house shivered like a structure of cards, for Joey was over six feet high and broad accordingly, with long swinging limbs ending in sledgehammer hands and anvil-like feet.

In a stupor of surprise, Malvina looked at him, blankly silent. She put down the kitten, quite unconscious that she had given it the kitchen table for a base, quite unheeding that it consolingly curled itself up where she laid it. The silence, brief though it was, pierced Joey's malevolent sensitiveness and pricked him to splenetic outburst,—

"Why, if you're not glad to see me I can go back the way I came, only *walking* 'stead of traveling!" and he crashed toward the door.

"No, don't!" cried Malvina, putting out a detaining hand. He was quite capable of carrying out his threat. His endurance was phenomenal,—when he could distress someone thereby. And she *had* been inhospitable. "It was good of you to come. I was s'prised; that's all. It was *real* good of you, Joey."

Still glowering, he allowed himself to relent, sullenly relinquishing his hold of the doorknob. Then he divested himself of his coat and cap, hanging them upon the upper corner of the cupboard. Nothing was too high to serve him for a peg.

He looked taller than ever in this confined dwelling. His immensity carried with it not the idea of strength, which is restful, but of force. His very coloring was aggressive. His hair was vividly red, glistening as if wet, and it virulently curled,—not loosely and softly, a lure for loving hands,—but curled with the vicious uniformity of copper springs. His eyes went inexorably with the hair, being brown as chestnuts but flecked with fiery red spots which gleamed maliciously whether in good humor or ill. His face was smooth except for the chin where there sprouted a suspicion of beard as crinkled, as red, as glistening as his hair. For the rest, he was a galvanic whirl of arms and legs.

"Not only did I think enough of you to come, but I brought you some supper," he grumbled. Snatching a parcel from his pocket and shaking from it a thick slice of ham, he thwacked a frying pan upon the stove, slammed the slice into it, and put all over the open fire where it was soon smoking and fuming and scorching and noisily spluttering.

"Now for a squint through this dog kennel," he grinned, becoming amiable at the smell of the ham. He plunged into the sitting room, caught his shoulder in the portière and without hesitation tore it from the pole and hurled it into a corner.

"Blamed poor taste putting hanging-truck in such a shantyran, wasn't it?" he asked, in a cordial tone which made sure of Malvina's coöperative approval.

She failed to answer him, being too nervously busy watching where the mud was spattering to, brought in on his heavy soles. She watched it with a weariness of heart out of proportion to the harm done, for she knew that October roads were prone to muddiness and that soiled boots could not help but leave a track, but tonight she seemed to see it all in a new light,—Joey was wilfully unchoice of where he stepped, and how, and the mud in which he knowingly trod was significant of other avoidable things in life through which he drove ruthlessly, leaving dark stains over the lives of others.

Done with the sitting room, he promptly blew out the light and brought the tea tray in with him.

"No use wasting oil, is there, Mallie?" he demanded, still sure of having done the commendable. He set the tray upon the kitchen table, saw the cat, and without comment or question put it outside.

"Is this cubby-hole the bedroom?" he demanded, looking in with such scowling scorn that Malvina shrunk guiltily, almost as if her former approval of it had made her responsible for its meanness and his dissatisfaction in it.

His scorn changed to noisy laughter.

"Of all the ratty quarters!" His laughter spent, he deigned to make the concession. "But I guess it's big enough to sleep in, just for tonight." As he spoke, he hauled the sheets from the bed, bunched them in a lump and tossed them to the floor, leaving the blankets in huddled disarray. Then he blew out *that* light. His overbearing demolishment seemed to result less from an indifference to the preferences of others than from an unassailable conviction of the universal superiority of his own.

"It's exac'ly as I thought, Mallie," he sagely announced. "The place is worthless, or it wouldn't 'a' been given to *you*." Here he flapped over the slice of ham and sent a grease shower hissing and snapping across the stove. "So I told Tod Beasley this morning that I'd trade it with him for his clover lot, down our way, and he, having folks hereabout, agreed. I told him the deeds and signing and such'd have to be seen to with you, but that you'd trade all right.

What do *you* (me ownin' the finest farm in the state) want with a truck patch like this? I told him you *couldn't* pay the taxes on it and I *wouldn't:* and that settled it. Let's have supper."

Picking up the brown paper which had wrapped the ham, he planked it on the table for a mat, and dropped the reeking frying-pan upon it. Then he kicked off his boots, jerked off his coat, tore off his collar,—and was dressed for dinner.

He munched and crunched his meal to its resounding end, then elbowed the dishes out of the way, never doubting for a minute but that Malvina had finished because he had, lit his pipe and extended his wool-encased feet toward the warmth of the stove.

"Now, ain't this pretty comfortable?" he advanced persuasively. "Ain't this better than being alone, Mallie?"

She had been glancing furtively at the ruin about her, her heart acknowledging the same desolation as was miserably patent in her disordered dwelling. Through the dusk of the rooms there still lingered the murk from the frying-pan. Huddled furniture, torn drapery, kicked rugs and muddied floors marked the havoc and wrack of Joey's ever unquiet passage. The banished kitten mewed persistently. Over and above all the material signs of destructiveness brooded the outraged spirit of Malvina's harmless individuality. The tragedy of the larger world—its dominion of aggressiveness—threatened to stamp itself in pale miniature upon her frightened face and silent lips, when through the blackest of storm clouds there burst the illuminating sun of rebellion.

"Ain't it, I say?" Joey jolted the table to obtain assent to his question; and then his jaw dropped almost in horror when he discovered that Malvina was not as usual quivering under his hectoring assault, and that her face was gathering the peacefulness known only to assertion.

"Joey," she said, explainingly. "The summer rent for my house was put into bank in my name, an'll pay for the taxes for some years to come, so I'm not a-going to sell yet awhile. No, nor trade, nor nothing, *never!*"

"What the—the—the dog!—are you goin' to do with the place?" he burst out.

Malvina rose to the awful height of levity.

"Play house," she answered, with a benign smile.

Joey's jaw dropped a hopeless inch lower, and under the encouragement of that sign Malvina arose with gentle firmness, opened the door and let in the kitten.

TAKING STOCK OF OUR NATIONAL ASSETS: THE FAR-REACHING SIGNIFICANCE OF THE WHITE HOUSE CONFERENCE: BY C. H. FORBES-LINDSAY

IN THE thirteenth, fourteenth and fifteenth days of May, in the present year, occurred one of the most momentous meetings in the history of the United States, which will long be remembered as "The White House Conference." When the President stepped upon the platform in the famous East Room, there were ranged upon his right hand the members of his Cabinet, and on his left, the learned Justices of the Supreme Court. Facing him were the governors of forty-three States and Territories, numerous senators and representatives in Congress, and some two hundred American citizens distinguished for special attainment in various spheres of scientific investigation or useful activity.

This assemblage, representing the highest authority and the best intelligence of the nation, had been called together by the President to consider the weightiest problem of our age—that involved in the adoption of measures for the conservation, development and judicious use of the natural resources of the country. A realization of the necessity for reformation in our economic system has been gradually growing upon us during the past ten years. It only needed to a full awakening that some strong voice should sound a warning. The statement of our danger and the suggestion of an avenue of escape came at one and the same time from a source which the President acknowledged in his opening address, thus:

"Especial credit is due to the initiative, the energy, the devotion to duty and the farsightedness of Gifford Pinchot, to whom we owe so much of the progress we have already made in handling this matter of the coördination and conservation of natural resources. *If it had not been for him this convention neither would nor could have been called.*"

The subject which commanded the attention of the Conference is preëminently one of national interest and scope, for its treatment must embrace every section of the country and affect every man, woman and child in the nation. It is composed of a number of inseparable elements which must be treated in just relation to one another and to the question as a whole. No petty considerations or selfish motives may be allowed to influence the policy that shall direct this great work. The constant object must be to secure the

greatest good to the greatest number. While the Federal Government must necessarily be the main agency in effecting the desired reformation and development, it is incumbent on each State to further the common purpose as much as possible by individual action. It must be clearly understood, however, that no State can move in the matter independently of the Federal authority where the interests of any other State are involved.

It is of the highest importance that a proper appreciation of State limitations and the necessity of Federal control should prevail. Perhaps a sufficiently clear idea may be conveyed by a single concrete illustration. The Ohio River is one of our main channels of transportation, but only a fraction of its potential utility is developed. The waterway is hardly at all improved from its natural state, so far as the facilities for navigation are concerned. Floods occur yearly, causing many million dollars' worth of damage and permanently preventing the occupation of considerable areas. At other seasons traffic is suspended for lack of sufficient depth and not infrequently hundreds of thousands of laden barges lie idle for weeks awaiting the rise of the stream,—entailing enormous loss. These disabilities could be readily removed and the Ohio River rendered an ideal waterway with a uniform depth of from nine to twelve feet throughout the year. In order to accomplish this it is only necessary to construct reservoirs near the headwaters of the stream and its tributaries. By this means the surplus flow could be impounded and fed to the channel in regulated quantities as needed. The entire works would cost not more than two hundred million dollars and, viewed as a pure and simple business proposition, would represent a splendid investment. Waiving consideration of the incalculable benefits to transportation from such a utility, the water power which could be generated by it would yield, on a conservative estimate, fifty million dollars annually.

Why has such an obvious improvement not been effected ere this? Because the interests of six States are involved in the matter and they can not effectively coöperate. The Constitution forbids any State entering into a treaty with any other. It is hardly to be expected that one State, and that the one which would derive the least benefit from the enterprise, should incur the expense and responsibility of constructing the necessary waterworks. Obviously, the Federal Government is the only agency through which such an undertaking can be carried out.

ANY satisfactory degree of success that may attend the prospective movement is dependent upon the acceptance of the foregoing proposition and strict adherence to it. It is gratifying to know that, with a few possible exceptions, it is in consonance with the ideas of the executive officers who met the President in deliberation on the subject. The governors in general displayed enthusiastic eagerness to engage in the proposed coöperative utility. Several of them expressed their determination to appoint State commissions as auxiliaries to the Federal authority. They provided by resolution for repetitions of the Conference at such times as the President may think proper to convene it. Before leaving Washington they formed an organization, which the press seems to have agreed to style the "House of Governors." This body is designed to meet annually for the purpose of discussing matters of mutual interest. It is quite within the bounds of probability that its future deliberations—the first of which is to take place in the ensuing fall—will result in the much-needed uniformity of State laws.

Ultimately, the responsibility for the success—or failure—of any great national movement must rest with the people. The present undertaking is no exception. The most important duties in the matter devolve upon every citizen. First and foremost, he should see to it that his vote is cast only in favor of men in hearty sympathy with the public cause as expressed by the policy of conservation and development of our natural resources which will be promulgated from time to time by the Chief Executive. Beside this, all other issues pale in significance, and it is entirely proper that the attitude toward this great question of a candidate for office should be made the test of his fitness for office, irrespective of his party affiliation.

Every man among our people can advance the national welfare by cultivating in himself public spirit, and stimulating it in his fellows. He can find, constantly ready at his hand, a hundred channels for its exercise. The man who makes a ton of coal serve the purpose to which two were formerly devoted, the man who removes a snag from a stream, or plants a sapling, contributes to the common weal.

Education is the key to the situation. We should all study the problems involved in this vital question and interest our children in them, for the task we have set ourselves is not one for a single generation, nor for two lives, but for all time. Never again will come a time when we may indulge in wasteful use of our natural resources without disastrous consequences. The day of our transcendent richness has passed for ever. No more may our people gain wealth from the

forest, the mine and the land by the careless gathering of their products. What we enjoy in future must be earned by hard labor and intelligent effort.

PERHAPS, in the zealous desire to excite the public concern, exaggerated statements of the depletion of our economic resources have been made, with the omission of the mitigating circumstances that exist. The truth, however, is sufficiently serious to command our grave attention and we should not be less active in the adoption of remedial measures because of the knowledge that prudent conduct in the future will avert disaster.

In one respect, at least, it would be well-nigh impossible to overdraw the picture of conditions. The denudation of our forests has been carried so far as to entail acute lumber famine in many parts of the country, to impair the normal regimen of important streams and to cause incalculable loss by soil erosion. The forested areas of our country are fast disappearing. Already we have consumed one-half of the timber which we owned when we entered upon our national existence. We are using annually three or four times the amount restored by new growth. In the past twenty-five years the consumption has nearly doubled. At present we cut forty billion feet out of an aggregate stand of two trillion feet. In New England the supply of timber is exhausted. The Northwest is being culled over for trees that the lumbermen rejected twenty years ago. The South has passed its maximum production and is sharply on the decline. Only on the Pacific Coast is there any considerable area of available forest remaining. Our present rate of consumption, with a continuance of our neglect of reboisement, would bring us to the end before the close of the current century.

The loss of the forest product is not, however, the only disastrous result entailed by its disappearance. The stamina of the soil and the stability of the stream are dependent upon the continuance of tree-clad watersheds. Where this state does not exist, insuring underground drainage and retarding the melting of the snow, the waters flow precipitately over the surface of the ground, scouring it in their course and divesting it of its rich top-covering. Thus, more than a billion tons of the most fertile soil are annually carried into the sea by our rivers. What an irretrievable loss this is to the nation may be inferred from the fact that the mean rate of soil formation is one foot in ten thousand years. Nor is this wastage the final effect of barren watersheds. The unrestricted flow which erodes the earth,

creates destructive floods and fills river channels with silt, thereby obstructing navigation and preventing the uniformity of supply necessary to the development of water power.

IN THE foregoing summary of the relation of the forest to the river and the soil, we have a good illustration of the interdependence of our natural resources. This close connection and coördination pervades the entire question of conservation and development. In it we find the basis of the principle that each element of the problem must be considered as an integral part of a whole, inseparably related to all the other parts. In it, too, we find the logic of the proposition that independent action by the several States would not be feasible and Federal regulation must control. It is patent that by the impairment of a watershed entirely within its boundaries a State might cause a cessation of navigation in another, or the destruction of farm lands in a third.

Reforestation is, of course, the main remedy for the condition of comparative exhaustion to which we have reduced this resource, second only in value to that of the land. That such a measure, if vigorously prosecuted, can be made effective is demonstrated by the experience of Germany. Finding herself in a similar plight, she set about repairing the situation with such energy that in the life of the present generation the growth of her forests will equal the consumption.

We may, by liberal outlay and intelligent direction, achieve a similar result, but meanwhile we must devise more economical methods of use. It is estimated by conservative authorities that, of all the timber cut in our country, no more than twenty-five per cent. is turned to useful account. In other words, notwithstanding the costliness of the material and its increasing scarcity, we waste three feet for every foot we put to a practical purpose. Well might the late Professor Shaler say: "Of all the sinful wasters of man's inheritance on earth, and all are in this regard sinners, the very worst are the people of America."

It is possible that we may contrive some degree of relief by the substitution of other materials for lumber. Cement, for instance, is coming into rapidly increasing use in construction and in parts of the country has almost entirely displaced wood and iron. Substantial benefit might be expected to follow amendment of the laws which illogically impose a tax upon timber annually while it stands, although we are satisfied to levy an impost upon other crops only when they are harvested. It would also seem the most wise and logical

course to encourage, rather than restrict, the importation of a material for which our needs are so much greater than our available supply. We use five hundred feet board measure of timber per capita annually as compared with sixty feet per capita for all the people of Europe. From this may be inferred the enormous price we are paying for the protection and enrichment of the lumber trust.

IRON and coal form the foundation of the prosperity of every commercial people. The relative positions of nations in the world's civilization today may be measured by the production and use of these materials. Our unexampled progress was made possible by the vast deposits of minerals within our borders. When the Republic was founded there were approximately two trillion tons of coal in the territory now forming mainland United States. This supply was practically untouched during the first quarter-century of our national existence; but during the succeeding seventy-five years four billion tons were mined by methods so wasteful that more than an equal quantity was either destroyed or left in the ground in such state as to be inaccessible for ever. In the ten years following eighteen hundred and ninety-six, as much coal was mined as during the previous three-quarters of a century, and with almost the same ratio of wastage. Production has proceeded at such a rate of progression that the output of each decade has been equal to that of the entire period preceding it.

The production of nineteen hundred and seven was four hundred and fifty million tons. That of nineteen hundred and seventeen, at the present rate of increase, will be nine hundred million tons; that of nineteen hundred and twenty-seven, one billion eight hundred million tons; and that of nineteen hundred and thirty-seven, more than three billion five hundred million tons, or an amount in that single year nearly equal to the total consumption of the seventy-five years ending with eighteen hundred and ninety-five.

If the present rate of output and loss should be maintained, our supply of coal will be entirely exhausted before the end of the next century. Of course, with the diminution of the beds, the price of the material is enhanced, and it is conceivable that before the earth can be completely depleted of its treasure, coal will have become too expensive a commodity to be used economically in industry. The reduction of our mineral resources will not permit any such alleviation as may be effected in the case of our forests. Every ton of coal and ore removed from the earth means so much permanent decrease in our reserves. Exhaustion of the supply is inevitable at some time

and can only be deferred by improvement in the processes of extraction and use.

Experts admit that the operation of mining can be so reformed as to result in seventy or eighty per cent. of a seam being extracted where only fifty per cent. is now taken out. But still more wasteful than our process of mining are our methods of consumption. Of all the coal burned in the power-plants of the country, upward of ninety per cent. is not turned to practical account. Only seven per cent. of the potential energy is actually applied, the remainder being expended in rendering this small fraction available. Some reduction of this wastage is being effected by the introduction of gas-producers, internal-combustion engines and steam turbines. It is not improbable that some means will be discovered of converting potential into mechanical energy directly, in which case the problem of our coal supply will have been solved. Meanwhile, we are encouraged by the government's experiments in the manufacture of briquettes to hope that our enormous fields of lignites will be available at no distant date. The extended use of water power and the revival of internal navigation will also lessen the drain upon our coal reserves.

THE story of our iron ore is equally disturbing. In the first seven years of the present century, two hundred and seventy million tons have been produced, a quantity nearly as great as that mined in the previous century. So far we have consumed one-third of our original supply. At the current rate of increase—doubling like coal every decade—the output for the single year nineteen hundred and twenty-eight will be two hundred millions. All the ore now known to exist—and it is doubtful if any more will be discovered—will have disappeared long before the end of the present century. The situation may be ameliorated by economy, but the main remedy must be found in our native inventiveness. By improved methods of mining and reduction a saving of at least thirty per cent. can be effected. A greater prolongation of the life of the resource may, however, be secured by the introduction of new alloys. It is within the memory of the present generation that nickel, silver zircon and tungsten have been allied with iron in the production of steel, and ferro-silicon is a discovery of yesterday. We have every reason to believe that the extension of research in this direction will lead to the invention of cheaper and better metals than we now have.

In the cases of water power and navigation we need not reproach ourselves with prodigal wastefulness nor bemoan irreparable loss.

The former is one of our most valuable resources, the development and use of which will entail large economies in our fuel supply. The application of water power, through electrical transmission, to our industries is rapidly displacing steam. No factor in our present economy is pregnant with such potent promise and it is of the utmost moment that it should be preserved from the grasp of the monopoly which has already laid greedy hands upon it.

The revival of our inland waterways must work powerfully toward the promotion of the national prosperity. They have been utterly neglected and allowed to deteriorate. We have sixty thousand miles of available waterways and less than half that mileage is used for navigation. Despite the enormous growth of the Lakes traffic, we have less river-borne commerce than we had fifty years ago. We must pay for our lack of foresight in this respect, but every penny expended upon the judicious improvement of our internal waterway system will be well invested. Hardly one of our commercial and industrial enterprises but must be benefited by the enlargement and increased economy of our transportation facilities.

URGENT as is the need of reform in all the resources that have been cursorily noticed, none of them is so essential to our future welfare as is the soil. Agriculture must be the foundation of every stable state. It is the basal support of all our commerce and industries. In the final analysis every element of our prosperity derives its vitality and vigor from the fostering influences of the land. It is, then, unutterly deplorable that we should be recklessly and needlessly destroying this most essential of all our natural resources.

The temptation to exploit the land for the sake of the present profit was great with our fathers, who could exhaust a tract, abandon it and without difficulty secure another. From this facility grew the haphazard and ruinous methods of farming that have reduced our principal industry to a lower state than that of any other considerable country save Russia. As an independent industry, capable of supporting a community, agriculture no longer exists in New England and the states of the Atlantic seaboard. The march of deterioration is rapidly moving westward. In the closing decade of the last century, the land values of Ohio shrank sixty million dollars. In Minnesota, the great wheat State, the average yield per acre has dropped one bushel in the past five years. In Kansas the retrogression is even more marked. The census report gives the average annual product per acre of all the farms in the United States as worth

eleven dollars and thirty-eight cents. This figure, poor as it is, must be materially enhanced by the returns of the newly opened territories, for the great agricultural States of Minnesota and Illinois fell considerably below it. With the most fertile land in the world, we are producing much less than other peoples extract from lands of poorer quality and longer subjection to tilth. During the decade ending with nineteen hundred and six, we raised thirteen and five-tenths bushels of wheat to the acre. In Austria and Hungary the average was seventeen bushels; in France it was nineteen and eight-tenths; in Germany, twenty-seven and six-tenths; and in the United Kingdom, thirty-two and two-tenths bushels. The figures for barley, oats and other crops show the same contrast. As an illustration of what can be done here under intensive farming, it may be stated that in Yellowstone County, Montana, the following yields per acre have been secured: Wheat, fifty-three bushels, oats, one hundred and sixty-three bushels and potatoes, twelve hundred and thirteen bushels, while fourteen hundred and twenty tons of alfalfa have been grown on two hundred acres.

The impoverishment of our lands has been brought about in the main by single-cropping and the neglect of fertilization. Almost everywhere in the country it has been the practice of our farmers to select the crop which promised the best immediate return and to plant their fields in it year after year without rest or change. Despite the protests of scientists and the demonstrations of agricultural colleges and experiment stations, the practice prevails today and is fraught with more sinister portent than the destruction of the forests, or the depletion of the mines. Whereas arable land should under proper treatment grow richer and more bountiful year by year, our agricultural acres are deteriorating so fast that the owner derives from them an annual income equal to no more than what would be a moderate rental if they were in ordinary condition and properly cultivated.

THE time has passed when a man might move westward and take up virgin soil at his pleasure, and, in general, it may be said that the son of the farmer of today must look for his sole heritage in the land his father holds. It is now a barren boast that "Uncle Sam has a farm for every one of us." In nineteen hundred and six we had less than ninety million acres of unoccupied habitable land. What a slim reserve that is may be realized from the fact that one-fourth of it was disposed of in the following year. We cannot add to our agricultural areas, except by irrigation and drainage, but we

may, by intelligent selection of crops, by scientific cultivation and by careful treatment of land, make it produce three or four times as much as it does at present. And this is the direction in which our development should proceed, for we must find room within the next thirty years for a doubled population in a territory already fully occupied according to our undiscerning ideas. The American farmer of the future must be a man of broad mind and technical knowledge. He must apply to his operations the same thoughtful management, precision and foresight that characterize the business conduct of the manufacturer and the merchant.

There is no reason why our farmlands should not yield as bounteously as ever they did, or as those of older countries do. But such a condition can be brought about only by intelligent effort and self-sacrifice on the part of our present farmers. More is needed than the mere cessation of the destructive methods of cultivation in practice. A definite system of restoration must be pursued. This may entail some curtailment of immediate profits but ultimately compensation for the temporary loss is assured. The farmer who shall enter upon a recuperative plan of treating his land by fertilizing it, rotating crops, etc., will enjoy a constantly increasing yield to the acre. It is safe to say that at the end of thirty years, the aggregate returns from the land will prove to be as great as could have been secured by any other method. But there will be this important difference, that, whereas by the present reckless manner of tillage he must leave a greatly impaired property to his children, by careful cultivation he can transfer to them vastly improved land.

THERE can be no question as to our prodigal recklessness and wasteful extravagance in the past, nor any doubt that we have called a halt barely in time to avert serious disaster. But there is no occasion to abate our faith in the wonderful resourcefulness of our country and our people. The President's vigorous appeal has met with a response that will bear immediate fruit. In energy and patriotism we are unsurpassed. In the possession of great and wise men we are rich. It is certain that all sections and classes of the nation will combine in the movement for the welfare of the present and succeeding generations. Without minimizing the necessity for prudence, forethought and economy in our industrial progress, we may cherish the belief that this great country of ours is at the entrance of a new era of prosperity which shall eclipse everything that has gone before it.

OH, YE OF THE LITTLE LOVES

OH, YE of the little loves,
Who give with the spendthrift's hand,
How shall ye ever know,
And how shall ye understand?
How shall ye know the great love,
And how shall ye understand,
Who waste your hearts on a faithless spring
Which ye call the Lotus land?

Oh, ye of the little loves,
Hiding your faces from pain,
What do ye give of the God
For the human that ye gain?
What do ye give of the very God,
For the human that ye gain?
Who break the vase of His precious nard,
And crimson the ground with stain?

Oh, ye of the little loves,
Who kiss in the golden sun,
Could ye but lightly guess
The glory by great love won—
Could ye but guess so lightly
The glory by great love won,
Ye would pierce your breasts with a jealous sword
For the thing that ye have done.

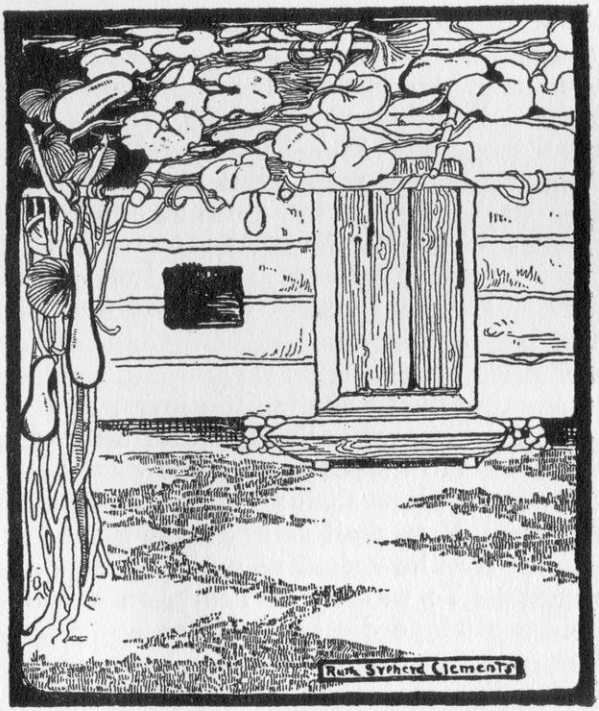
Oh, ye of the little loves,
Who give with the spendthrift's hand,
How shall ye ever know
And how shall ye understand?
How shall ye know the great love,
And how shall ye understand?
Ye waste your hearts on a faithless spring,
And ye die in a winter-land.

—EMERY POTTLE.

IN THE DAYS OF THE GOURD: BY MARTHA McCULLOCH WILLIAMS

HAT good creature the gourd has fallen from its high estate of use to one of mere ornament. This is not as it should be—in gratitude if no more. Our grandmothers owed it so much in the way of housewifery, that their era may be denominated the days of the gourd. Witness its uses. They had pretty well every manner of it. There was the great calabash with inch-thick shell, and capacity from one to ten gallons. It was none so easy to raise in perfection, but once raised, lasted through two lifetimes. And it held pretty well everything—sugar, flour, feathers, molasses, dried fruit, eggs, soap, lard, candles, the family sewing or Sunday clothes. The neck always short, was, in the very biggest specimens, conspicuously absent. These big fellows were cut at the top, a smooth round opening to which a wooden lid was afterward fitted accurately. If it was desirable to swing up the gourd, double holes were bored some little way from the rim-edge through which leathern or rawhide braided thongs were passed up and down, and knotted together above so as to serve also for handles.

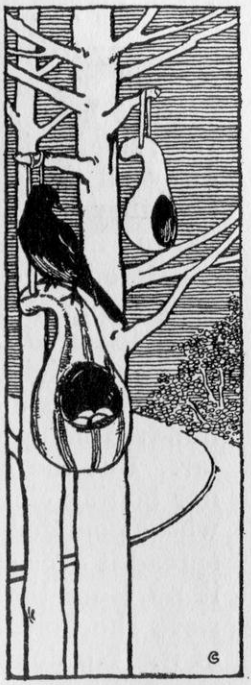
After cutting, all the inside came out, the pith was scraped away and the gourd filled with boiling water, well dashed with lye. This with the scraping was repeated many times, until the gourdy taste was gone, and a clean hard woody shell remained. All gourds which had to do with eating or drinking got approximately the same treatment, al-



THE DECORATIVE GOURD VINE.

though smaller ones were boiled several hours, then finished off at once.

Other uses, other manners. An egg-gourd needed only to have a squarish opening cut well above the round of it, and seeds and loose pith removed. The ideal egg-gourd was rather deep, with a short handle so crooked it would stay securely over the arm of the egg-gatherer. These gathering gourds were of moderate size, and emptied into the big main calabash which sat under the bed or up the loft. It was the crowning mercy of the big fellows that they were flat enough at the blossom end to stand solid. A big neckless gourd, very much flattened at each end, was sometimes sawed in two and fashioned into wash basins, or sewing baskets. But the dipper-gourds and the dancing ones were round or oval. Care was taken in the growth of dippers to have them straight or crook-handled at need. Gourds with long, straight handles were best for many things—as dipping up boiling liquids, washing down hogs at killing time, and lying primly across a water pail. But for hanging on a peg, or swinging to a martin-pole, crook-handles were the thing. So for straight handles the gourd vines were trained to run high—over fences or brush heaps or cabin chimney. The young gourds thus pendant, straightened and stretched of their own weight. Contrariwise, if the vine ran huddled over itself, sprawling on the ground, the handles were sure to crook—sometimes after the fashion of a ram's horn.



THE MARTIN GOURDS WHERE THE BIRDS NESTED.

Every cool spring, no matter how deep in the woods, had its gourd, either hung upon a near tree-trunk, or thrust over the end of a stake driven in the brink. This for wayfarers—who were never lawless enough to break or misplace the drinking vessels. Powder gourds, beloved of hunters, were round and short-necked, small enough to slip handily into the pocket, with a wooden stopper neatly fitted into the cut end of the neck. Seed-gourds and bottle-gourds were cut in the same fashion. A full set of seed-gourds, duly labeled, made a fine showing upon the cabin shelf. Yet they were not so near the hearts of the cabin-dwelling folk as the martin-gourds swung

from the cropped boughs of a tall sapling, planted pole-fashion a little way from the door. The gourds were bigger than the two fists, cleaned out and cunningly cut so as to keep the mud nest secure yet not hold rain-water. House martins built in them year after year, singing joy in the shelter, and paying rent and more by fighting away all the plundering hawks. Crook-handles were best here, in that they permitted the birds to perch upon them an instant before darting into the nest.

Here is a gourd tradition lightly touched with romance. The first wheat crop of a pioneer settlement had been flailed out, winnowed and measured, and found to amount to almost three bushels. Half of it was religiously set aside for seed, but the landowners yearned for at least a taste of wheaten bread. There was no flour-mill within a hundred miles—indeed corn was beaten to meal in the hominy mortar. But the house-mother was resourceful—she had neither sieve nor bolting cloth, but meant to have flour. So she had a bushel of wheat pounded fine, then took her bridal veil, of fine silk gauze, and spread it over a big gourd which had been cut on both sides, leaving it no more than a hoop with a gourd-handle. In this improvised sieve she bolted her flour, and triumphantly made cake from part of it. No doubt she got the idea of her sieve from the gourd milk-strainer, which remained in high favor as late as the Civil War. The gourd, a straight-handled one, not too big, is cut at top and bottom, and, after cleaning, covered with a knitted cloth just wrung out of boiling water. The cloth is pressed well over the edges, and deep down inside, then all set in the sun to dry. Fully dried the cloth holds firm throughout a long straining.

There was a special strain of banjo-gourds, long and straight handled and very round in bowl. The top was cut almost flat with the handle. Under-cutting varied, according to the maker's whim, or the tone he aimed for. Sometimes it left no more than a rim two inches deep. Sometimes also there was just a tiny moon-face below. Sheepskin stretched over the top and strings fastened to pegs in the rim and handle completed an instrument, which in trained African hands gave forth weird untranslatable harmonies.

If the gourd had many uses, the trough and its congeners had more. The big sugar trough, dug from a poplar trunk, often held two hogsheads of sap, which was fetched to it in gourds from other smaller troughs, set under the spiles. But the salt trough was even bigger—besides a well-furnished smokehouse had several of them. Meat was packed down in them to take salt for later smoking. Some

were twenty feet long and stood breast high. The outsides were hewn smooth, the insides finished, after digging out, with the adze. Indeed the adze and the drawing-knife were very present helps in pioneering. Skilled use of them made possible beautifully smooth bread trays of native ash, and spoon-shaped oak fire-paddles, nearly as good as iron shovels in heaping coals on a lid, or throwing ashes off seed fire. Axe and hoe-helves had to be drawn smooth and to shape, so did the staves of piggins, noggins, indeed all small cooperage.

A piggin was of hard wood, preferably cedar, and metal-hooped if possible, but young hickory answered at a pinch. It was unlike the bucket, in that it lacked a bail, having instead as handle one of the staves standing a hand's length higher than the others, and shaped so as to be easily and firmly held. Most commonly it was sacred to the dairy and to drinking water. Much scouring kept it always sweet. The noggin, broader and shallower, also got much scouring, but was less inviting. It was used for washing up dishes, vegetables, fruit —pretty well anything. The "cup-noggin" was sacred to tableware.

What mere modern ever saw a broom-sedge broom or one of corn, tied without a handle? Both were standbys of our great grandmothers, and whatever the stuff, the broom was bound with white-oak splits. Broom-sedge, tall, tawny, feather-seeded, is the pest of grassland, but, tradition has it, was taken from the seaboard over the mountains because the settlers pined for the sight of it no less than the uses.

EVERY COOL SPRING HAD ITS GOURD DIPPER.

A HOUSE THAT HAS THE QUALITY OF AN OLD HOMESTEAD: BUILT BY LAURA COOMBS HILLS AT NEWBURYPORT

F COURSE, the most desirable thing one can have in the way of a home is an old house built by one's grandfather or great-grandfather and modified by each succeeding generation until it comes into one's own possession as an embodied history of the life and nature of one's forefathers, possessing a ripeness and sense of permanence that are eloquent of long years of comfort and usefulness. But the next best thing is a home planned so entirely in accordance with one's own individual tastes and habits that every nook and corner of it is so inevitably the right thing that no alteration would be possible and "moving" is never to be thought of.

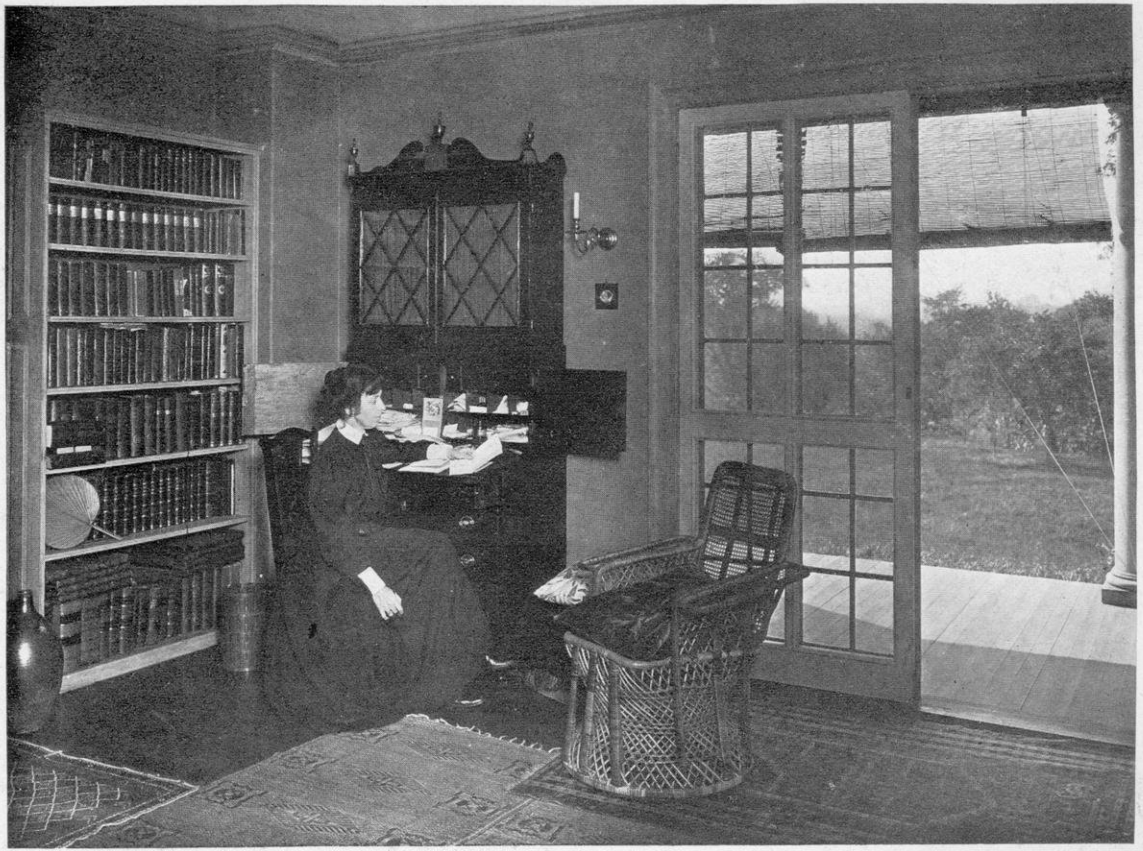
This last is the kind of a home that Miss Laura Coombs Hills, the famous miniature painter, has built for herself in her home town of Newburyport. The house is comparatively new, but so thoroughly does it belong in the atmosphere of this delightful old town that it gives the impression of having been built two or three generations ago, when life was a more peaceful affair than it is now and when a house like this was meant to serve as the homestead from generation to generation.

Miss Hills chose for the site of her home a low hill on the outskirts of the town, overlooking a wide landscape that is typical of New England. The grass plot which surrounds the house is not a lawn, but just grass, and the foundation of the building is sunk so low that the grass blades touch the shingles of the side walls. A winding gravel path leads to the single step from which one reaches the front porch, and on the sides of the hill, at a sufficient distance from the house to give plenty of air and sunlight, are scattered clumps of slim young trees, just enough to relieve the wide outlook without interfering with it.

The house itself is planned on the simple lines so often seen in New England. There is apparently no effort to adhere strictly to the Colonial style, and yet the whole seeming of the house is the same as that of the finest of our old Colonial dwellings. The shingled walls are stained in a soft light tone of greenish gray, and the window frames and pillars are pale buff. The needed color accent is given by the traditional green blinds, without which no New England house seems really to belong in its environment. Vines clamber here and there around the pillars and over the lattice, and beside the house

From a photograph by Mary H. Northend.

"A WINDING GRAVEL PATH LEADS TO THE SINGLE STEP, FROM WHICH ONE REACHES THE FRONT PORCH."

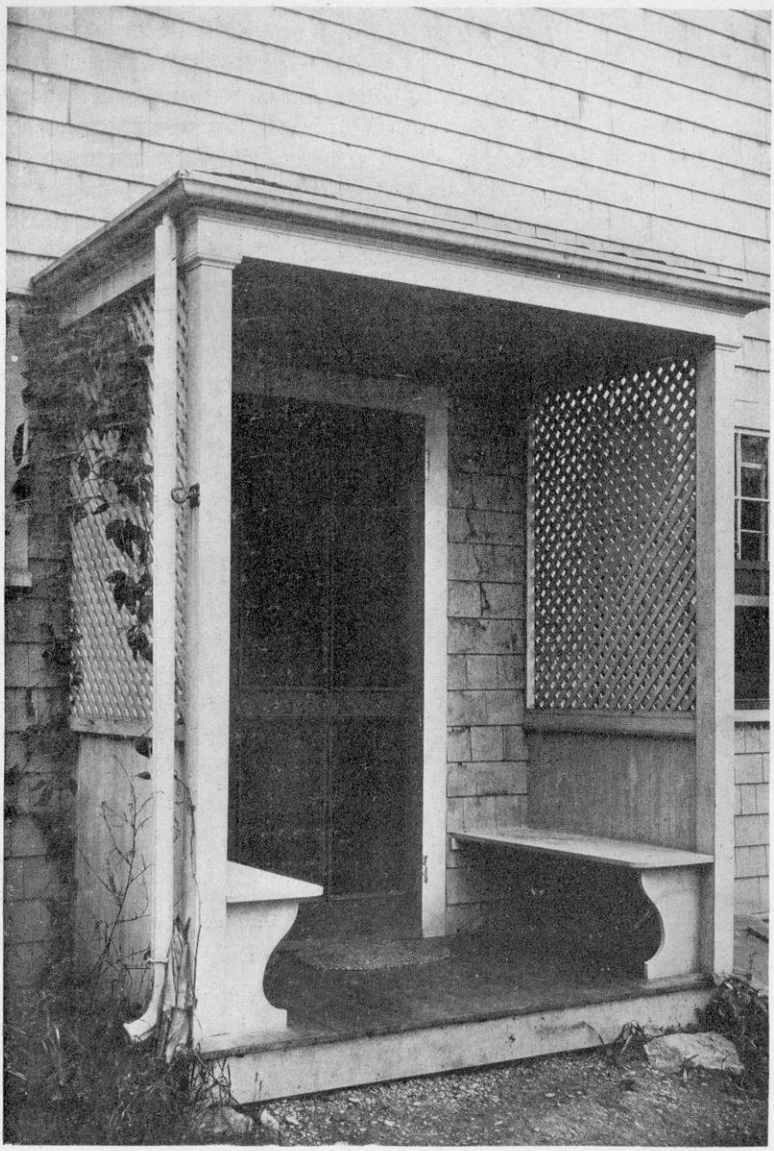


From a photograph by Mary H. Northend.

"BETWEEN THE GLASS DOORS AND THE CORNER WAS SPACE JUST LARGE ENOUGH TO ACCOMMODATE MISS HILLS' OWN PARTICULAR DESK."

From a photograph by Mary H. Northend.

"THIS END OF THE ROOM SERVING AS A DINING ROOM AND THE ROUND MAHOGANY TABLE AND RUSH-SEATED CHAIRS ARE A DECORATIVE FEATURE."



From a photograph by Mary H. Northend.

THE KITCHEN PORCH MAKES A PLEASANT LITTLE SITTING ROOM.

a row of tall hollyhocks carry color and life up against the soft gray walls. The roof is low pitched and admirable in line and proportion and the grouping of the windows is such as to divide the wall spaces in a way that relieves the effect of bareness which otherwise might accentuate a little too much the severity of the plan. A wide veranda runs across the front of the house and is recessed under one corner where the entrance door stands. This is a wide Dutch door that in itself conveys a sense of welcome, and it admits the guest directly to the large living room, with its big fireplace at one end and the wide glass doors in front, which open upon the veranda and give such an admirable view of the landscape and the western sky that there is always a sense of nearness to out-of-doors.

IT MUST be admitted that in planning her house, Miss Hills departed somewhat from the precedent of the orthodox architect. She did all her experimenting with a tiny model, from which she not only planned every detail of the construction, as an architect would have done, but also, knowing exactly what she intended to put into the house, she furnished the rooms down to the last detail while she was planning it. She was fortunate enough to have a quantity of beautiful old mahogany furniture, and while the house was still in the pasteboard model stage every piece was assigned to its proper place, and, where it was necessary, the place was planned for it. There was no guesswork as to whether her long Chippendale sofa would fit into a recess in the wall,—the recess was made to fit the sofa, which will probably stay there as long as it and the house hold together. Between the glass doors and the corner was a space just large enough to accommodate Miss Hills' own particular desk and the bracket light beside it, and the shelves for her favorite books were placed within easy reach of her hand. In the bedroom upstairs there was just room enough left between the door and the wall to accommodate the stately four-poster bed. In fact, every space and every recess was planned with an eye to the best disposition of the beautiful old furniture which forms such a valued part of Miss Hills' possessions.

Although the veranda harmonizes so completely with the plan of the house, and although the house seems in all respects to be built on the old Colonial model, nevertheless the use to which the veranda is put is distinctly modern. It is an outdoor living room, furnished with a swinging couch and comfortable deck chairs and settles, and in warm weather much of the day is spent in this pleasant place. The living room is full of convenient nooks and corners. The stair-

case is the main structural feature in one corner, and the little recess just back of it is very homelike. This end of the living room is used as a dining room, and the round mahogany table with its rush-seated chairs forms one of the most decorative features of the place. A swing door leading to the kitchen is directly back of this dining table, and the fireplace is comfortably near. The two tall cupboards which flank the fireplace on either side show the practical common sense of the designer as well as her keen feeling for decorative effect. The lower part of each of these cupboard doors is paneled and the upper part is filled with small square panes of glass, giving a glimpse of the quaint old china that fills the cupboards. But in the right-hand cupboard only the upper glass part of the door opens, the lower panel being a part of the wall. The reason for this is found by stepping into the kitchen, where the space is found to be given to another closet, the lower half made deep and commodious for pots and pans and the upper, which is only a few inches deep, intended for spoons and shallow muffin pans.

THE kitchen itself could only have been designed by a woman and a housekeeper. It is not a large place, but every inch of space is utilized to the best advantage. The whole wall space on one side is occupied by a dresser of Miss Hills' own devising, which is not only beautiful to look at but most convenient in operation, for there is a lower door that on opening swings out a flour barrel, a rolling board that pulls out, a most economical use of drawers, lockers, shelf and cupboard room and ample space for the storage of provisions and cooking utensils. The range is placed conveniently near against a chimney breast of brick that covers the whole wall space from floor to ceiling and from door to door. A little shelf filled with books offers the opportunity to use pleasantly and profitably the leisure time that may fall to the lot of the maid, and the kitchen porch adjoining makes a pleasant little sitting room, with its lattice and built-in seats and its convenience to the side gate. This little porch is quite out of range of the piazza, and, indeed, in all the arrangement of this part of the house there is shown the greatest consideration for the comfort, convenience and privacy of the woman upon whose shoulders the main burden of the housework rests.

THE TRANSPLANTED TEUTON AND HIS AMUSEMENTS: BY MARION WINTHROP

N RECKONING the various foreign colonies contained in New York it has been stated that New York has a larger German population than any German city with the exception of Berlin. No doubt the figures are correct as applied to the German *speaking* population. That, however, is composed of Austrians as well as Germans, and a vast number of Austrian Jews. Few New Yorkers realize that practically all the German speaking Hebrews in New York are Austrian. The real German Jew is quite a different type. And so while there are a large number of entertainments provided for this German speaking population—from the simplest and most inexpensive to such excellent performances as have been given for a number of years at the Irving Place Theater,—the result is not an exact transcription of either German, Austrian or Jewish taste in entertainment, but a blending of all three, more or less modified by the ways of the new world.

The concert hall of the type common to both Germany and Austria is to be found here,—a decent place where the audience sits at little tables where food, beer and other drinks may be enjoyed during the entertainment. At one of these places opened recently,—*Zum Schwarzen Adler*,—a German presentation of the Viennese opera "A Waltz Dream" was given for a time. As present it offers a sort of vaudeville entertainment with attractions from Vienna and the *Wintergarten* of Berlin. Another house, the Orpheum, on lower Third Avenue, has been giving a spirited German presentation of "The Merry Widow" nearly all winter. The contrast furnished by the two productions, the American and the German, of this most popular of light operas is most significant of racial differences. In the first place the German production employs the original text, which is in a vein of comedy quite different from the peculiar brand of buffoonery and farce demanded on Broadway. There is an occasional apparent simplification and broadening of a point, and probably some cuts in the dialogue, but on the whole the characters have a relative dignity and verisimilitude. In the American version the characters are all—with the exception of the two principals—the traditional wearisome comic opera abortions in which ambassador and prince and servant carouse upon equal terms. The exquisite art of Miss Lina Abarbanell (who is a German from Berlin) and the charm and esprit of Donald Brian stand out almost incongruously from the crude familiar framework of horseplay and childish jokes that have made

up the so-called comic opera of Broadway as far back as my memory extends. Also the lines in the translation have been much spun out, elaborated and localized, so that little or nothing of the original text remains. It is in the relative excellence of dancing and singing that one perceives the widest difference in the demands of the two audiences. Although the orchestra of the little German performance (where the price of seats ranges from twenty-five to seventy-five cents) is composed of only six pieces besides the piano, the rendering of this fragrant midsummer night music shows a most delicate musical sense of its light rhythms. But the dancing is heavy and the women of the chorus are not pretty. They are selected for their vocal ability. One of the women, Frau Gerold, who has appeared in some of the light operas at the Irving Place Theater, has a voice that might have assumed grand operatic proportions with proper training. The management has found that in order to retain their Third avenue audience they cannot let the musical part of the entertainment fall below a certain standard! The female members of the cast are all Austrian Hebrews with the exception of Fraulein Thury, a little person of distinct spirit and charm who takes the part of the prince. She is a Hungarian and has sung the rôle in Vienna concert halls, as have several of the other performers. The reason given for having a woman in this part strikes one as characteristically Teutonic: Because singing in a smoke-filled room is bad for the voice, tenors are reluctant to subject themselves to the risk. But for some unexplained reason it is supposed not to be injurious to the female voice! One of the principal male parts is taken by a waiter in a well-known German restaurant. None of the performers is American born.

In the American production, as in all Broadway musical comedies, the voice is a third consideration. In the selection of female actors beauty is the first consideration, then grace in dancing. A voice is reckoned as an additional advantage. In Mr. Savage's productions, however, the musical standard is always much higher than in other similar entertainments. The "Merry Widow" orchestra is excellent, and in Miss Lina Abarbanell (formerly of the Metropolitan Opera Company) who is now playing the rôle of the widow, he has secured a singer who is a musician with a voice of a peculiarly appealing childlike quality, and who is moreover a dancer with a natural gift of motion that is little short of genius. She floats, she blows across the stage. One feels convinced that she has concealed wings. For it is a motion too ethereal to be associated with one's usual conception of the movement of feet.

CAN INTENSIVE FARMING BE MADE PRACTICAL AND PROFITABLE FOR THE INEXPERIENCED MAN FROM THE CITY? BY EDGAR J. HOLLISTER

THE first question asked of one who advocates a return to farming as the most natural and reasonable method of earning a living and providing a home and a competence for the future, is: What about the practical side of such a scheme? Would it be possible for a workman used to city life and to the factories and possessing little knowledge of farming to cope with the difficulties which frequently prove too much for the man who has lived all his life on the farm and whose father and grandfather before him have followed the plough? Also, the question is likely to come up as to the actual results to be obtained by modern methods of intensive agriculture. Reports of experiments made by experts is one thing, but the actual putting into practice of these methods by the man who is more or less inexperienced in dealing with the soil is another, and generally there is a difference between the two so wide that the two results hardly seem to apply to the same thing.

With regard to the first question, I should say that the practical difficulties in taking up farming could soon be surmounted by an intelligent, energetic man, however inexperienced, who was willing to learn all he could from reliable sources and to gain his own experience as rapidly as possible by keeping a strict account of everything done on the farm and profiting by every failure as well as by success. We purpose in this and succeeding numbers of THE CRAFTSMAN to give all the practical information, advice and suggestion that lies within the scope of our own experience and upon which we are therefore entitled to speak with authority. Owing to the activity of the Department of Agriculture, the sources of more technical instruction are also abundant, and when a man's mind is once turned in this direction it will find plenty of good stuff to feed upon. As to the actual results of intensive agriculture, I can only say that after years of a varied personal experience, covering a variety of climatic and soil conditions in this country and Canada, I know that it is possible by the use of intensive agriculture to double all of our agricultural products and that each farmer can by taking the necessary care not only increase his own profits very materially, but bear his share in bringing the general productiveness of the country to the point so imperatively needed in view of the demands of our increasing population. In

some ways the man who goes to the farm fresh from other occupations has an advantage over the man who has stayed on the farm, for the reason that his inexperience is balanced by a certain mental alertness that comes from being vitally interested in a new thing.

IN MY mind there is no question that we have reached a period in our national growth where it is absolutely necessary to take more interest in the matter of increasing the crop producing power of the soil. We are only beginning to feel the pinch of this necessity, but the conditions that now exist are bound to increase, and we have our choice between beginning now to apply the remedy or of delaying action until widespread distress compels us to force the adoption of some such reform. The chief difficulty is that the people at large do not see the necessity as it is seen by statesmen and thinkers who grasp the whole situation and realize its significance; and until we can formulate a practical plan by which those who are suffering under present conditions will be enabled to take up the work of cultivating the soil with the idea of getting a large yield from a small area, progress must necessarily be slow. The tendency of human nature is to get all it can and let the future take care of itself, but we seem now to have reached a period in our national growth where the future must be taken into consideration and a return to agriculture brought about as almost the only means by which our national strength may be increased and our prosperity put on a permanent basis.

For proof of the effect of such a movement upon our national life, we have only to turn to the history of the more densely populated countries of Europe, where such conditions as we are coming to existed long ago. One of the most significant evidences of the responsibility which rests upon the farmer is found in the payment of the enormous war indemnity which was required of France by Germany before the German army of occupation would be withdrawn from Paris. The treaty of peace stipulated that this indemnity was to be paid in specie, and it was then that the small farmers from all parts of France rose to the situation and brought to the government all the gold and silver coin they had saved, taking in exchange the French paper money. The debt was paid and the country spared further humiliation from the presence of the German troops. Since then, France has not only redeemed her obligation, but is today financing other countries. Her people are so contented that very few find any inducement to emigrate, and the thrift and prosperity of the small farmer and shopkeeper in France has grown to be proverbial.

Another instance of a country where small farming by intensive methods is made the basis of national strength is found in Japan, where forty-five millions of people,—of whom thirty millions are agriculturists living and working on an area less than the state of New York, have been the means of building up and equipping a nation which in a few years has come to rank among the foremost of the powers. Intensive agriculture in Japan is the outgrowth of conditions. The country is rough, and farming is carried on under unusual difficulties. In many instances the land has to be made into a series of shelves, with raised ridges on the hillsides to prevent the soil from washing down into the valleys. And so great is the value of this land that the Japanese are devoting considerable attention to finding plants that will grow on these ridges and yield profitable food supplies. It is hardly too much to say that in this intensive farming of small tracts of land lies the secret of Japan's marvelous advancement, for it is nothing more nor less than scientific thrift, and the turning to the utmost account of every resource of the country, a state of affairs diametrically opposite to that which obtains in America today.

IN THIS country of vast size and apparently illimitable resources, it is hardly to be wondered at that the intensive farming of small tracts of land has not, up to the present time, been considered a general necessity. Under certain conditions and in small communities in various parts of the country it has been and is carried on with a marked degree of success. For instance, at Norfolk, Virginia, where the climate is mild in winter and where the soils are of a sandy nature, making easy all the processes of agriculture, market farming has reached a wonderful degree of perfection. All the northern markets are made accessible by the fact that cheap transportation by boat is easily obtained, and when these transportation facilities were extended to Florida, many farmers moved further south, where fruit and vegetables might be produced and sent to the market in the early winter. Again, the climatic conditions near Kalamazoo, Michigan, coupled with a limited area of the kind of soil best adapted to the production of celery, induced a group of Hollanders in the early seventies to take up the growing of celery, an industry which has since made this city famous. The thrifty Hollanders drained the tamarack swamps, peat bogs and river bottom lands in Kalamazoo, and, merely by the practical application of good principles of farming, they developed an industry that brought to the city banks annual deposits in the neighborhood of six hundred thousand dollars. The

total area under cultivation is about seventeen hundred acres, which has been cut up into small farms containing from two to five acres each. As the production of the celery crop is largely hand labor, each family shared in the cultivation of its own farm, and communities were rapidly built up where fifteen hundred people are now gaining an ample livelihood. The industry was developed in other parts of the State, on limited areas adapted to this particular crop. Modern methods of fertilization and cultivation have been introduced and the standard of the crop has been raised so that the net profit in most cases ranges from two to three hundred dollars per acre.

For some years the Department of Agriculture has been advocating the practical application of intensive methods on farms where the dairy industry might be used as an additional means of livelihood and for the purpose of restoring the fertility of the soil. Tons of valuable literature have been distributed among the farmers and those interested in the problem, setting forth the advantages that might be gained from proper drainage of the soil, the selection of seed and a system of crop rotation. Much good has been accomplished by these means, but one difficulty has been met which seems apparently insurmountable. The Department work has been simplified more and more that the farmer might better understand how to put into practice the fundamental principles that govern success in agriculture; but by reason of his desire to expand and cultivate a larger area than his energy and capital would permit frustrates to a great degree his own efforts. Instead of putting all the care upon a small tract of land necessary to make it as productive as possible, he almost invariably turns to the purchasing or renting of more land to farm in the same old way, hoping that with good weather he might realize larger returns.

Nevertheless, these obstacles are largely due to faulty standards and methods that are either extravagant or over-conservative. Enough has been done even in this country to show the results that may be obtained by intensive methods of farming, and it is my belief that all that is required to make such a movement general in its scope is to bring within the reach of the workingman a plan that he can undertake with a reasonable prospect of success. The matter of securing land would be comparatively easy in the New England States, in New York or in New Jersey, where there are a number of farms well located and with an abundant water supply that can be purchased at a price ranging from ten to fifty dollars per acre, according to the condition of the buildings. Throughout the Northern, Central and Western

States, where the land is not so rough, the prices would run from fifty to one hundred dollars per acre. The advantage of the Eastern lands is that they lie in a much more thickly settled part of the country, and where it is possible to restore the soil to a fair state of productiveness, it is better for the small farmer to be located somewhere near a city or a large town, as this provides his market and does away with exorbitant charges for transportation.

Within easy reach of New York and the coast cities there are large areas of salt meadows and swamps that are not only favorably located but may easily be reclaimed for cultivation. There tracts may be purchased at prices ranging from five to one hundred dollars per acre, and when they are diked and reduced to cultivation by modern methods and treatment, they could easily produce a net income ranging from fifty to one hundred dollars per acre in common crops and five hundred to one thousand dollars per acre when used for the production of such special crops as celery, lettuce, asparagus and other vegetables. This is not theory, but a matter of which I speak from actual experience. In the New England States there are large tracts of land well located and with a good water supply which range in price from ten to twenty dollars an acre. A portion of this land is now under cultivation and the remainder is covered with small timber, so that agriculture and forestry could be taken up with a very encouraging prospect for success.

THE most encouraging feature in starting such an enterprise is that a beginning can be made by a few people, say from five to ten, and the acreage required need not exceed fifty to one hundred to give each person sufficient land to cultivate. As a rule, in getting property of this kind, not much ready money is required, as most of it is mortgaged and the mortgage could be taken over with the place, leaving the first payment required very small. If the location chance to be a very desirable one, the group of people settling there would be wise to take options on surrounding lands, and thus avoid competition which might come from speculators in such real estate, who would inevitably be attracted by the first appearance of a settlement. In selecting the location, the first requisite is a good and convenient supply of wholesome water. What is termed loamy soil is preferable, with a small portion of low muck ground, where the outlet for local and main drainage of the whole farm is ample to meet all necessities. If there happen to be wood lots and orchards, so much the better, and stone piles are an advantage.

In the beginning a small portion of land, say three acres, could be set aside for the building site. One acre of this might be planted with such fruit as would permit the keeping of poultry in the orchard for the greater part of the year. When the fruit ripened the poultry could be confined or temporarily removed without much detriment. The variety of fruit trees planted could embrace peaches, plums, pears, dwarf apples and cherries,—about seventy-five to one hundred trees, which should come into bearing the second year after planting. This acre could also furnish room for keeping one hundred laying hens in small colony houses scattered over the area. The net income from these hens can safely be estimated at one hundred dollars per annum, and by the fourth year the fruit should also net a return of one hundred dollars, which income would materially increase as the trees grew older. On the remaining two acres surrounding the house would be a lawn with shrubbery, shade trees and flowers. The rest of the land would be devoted to the farm proper, one-fourth of which should always be in clover, which is most useful as a reconstructor of the chemical and physical conditions of the soil. The area planted to clover could be changed every year and a half from one part of the lot to the other, arranging it so that every part of the land would be planted to clover at least every fourth year. While the chief returns from the clover crop would be in the increased productivity of the land, there would still be a revenue of at least ten dollars on the clover hay harvested, and also a pasture would be furnished for the poultry during the time of their removal from the orchard while the fruit was being harvested.

On the remaining three-quarters of the land vegetables and small fruits might be continuously cultivated, producing sufficient for home consumption and preserving, and leaving a goodly crop to be marketed. In addition to the income to be derived from the sale of fresh fruits and vegetables, and of canned and preserved fruits, jams, jellies and the like, there is a great demand for pedigree seed stock. The seedsmen and gardeners pay fancy prices for tomato seeds and selected corn and beans, all of which could be produced not only for the revenue that would come from their sale, but for the opportunity thus offered to gain a practical knowledge of the breeding of plants up to a high standard with a view to increasing the yield, improving the quality and hastening the time of ripening of all such crops,—features much to be desired in intensive agriculture.

In the methods by which these results may be obtained, the question of drainage occupies a prominent place, as the benefits de-

rived from a good system of drainage are far-reaching. Tile drainage of land is the most practical method, but the expense of it has militated against its general use. If, however, the tillers of the soil could once realize the advantages to be derived from such methods of draining and the profits likely to accrue from such an investment, the introduction of tile drainage could not fail to be more rapid. The most practical way would be to lay a line of tile along one side of an acre lot and see what it would do. The expense of this would be trifling in comparison with that of putting in a system of tile drainage throughout the whole area, and the increased revenue from the part so drained would not only encourage the cultivator to drain the rest, but would materially help him in paying for it. This principle applies to all methods of intensive agriculture. Try them in a simple way and on a small scale at the start, and the chances are that the result will be sufficient to encourage further experiments, while the load of expense would not be so heavy as to be discouraging.

By the systematic manipulation of a three-acre plot, the gross revenue from the poultry, fruit, vegetables and seeds should reach at least one thousand dollars a year. This result, however, would depend upon the putting into practice of such methods as have now been found to be practical and that govern success. This leaves out of the calculation winter farming by means of hot beds, cold frames and small greenhouses, such as now enter largely into the problem of cultivating small areas by intensive methods, and also leaving out the incubators and brooders necessary to the highest development of the poultry plant. All of these will be taken up later, when we purpose to develop in detail each branch of the subject in its turn.

THE LITTLE GARDENS OF THE EAST SIDE: HOW THE POOR CULTIVATE WINDOW BOXES: BY ELISABETH A. IRWIN

O ONE can go from the tenement districts of the city in the spring into the fresh green open country without a mad desire to transplant a solid block of the hot seething city into the midst of the green fields or under the shading trees. For years this has been going on under the fitting name of Fresh Air Work, though it might as fittingly be termed green grass work. Only recently, however, has the reversed process been undertaken, the bringing of the mountain to Mahomet, the grass and flowers into the very tenements, where those who for many reasons must stay all the year can enjoy the spring, the summer, and even the winter, in watching the miracles that take place in a little box of earth.

Last spring the New York City Branch of the National Fruit and Flower Guild placed five hundred gardens on the window-sills of five hundred homes, and the story of how they flourished is a proof of the care, affection and appreciation they received from the five hundred gardeners.

In the autumn only three of these little gardens had not actually flourished and only one had died. Each box with its two geraniums, two ivies and another vine takes with it instructions for proper care and an opportunity to buy seeds for new flowers.

It is interesting indeed to note the individuality that develops when the planting season comes. Sweet potato vines and peanuts have been tried with some success by several Southern negro families, while the Italians aim always for color effects. The German gardens also flourish characteristically. That many of the original plants are taken from the boxes to be transplanted to the cemetery and are replaced by new slips tells its own story.

When one window-box goes into a house from the Guild, it is noticeable that soon after there appear in neighboring windows home-made imitations which are of course the sincerest flattery. Bureau drawers cut down and painted green are frequently adapted to the purposes of agriculture, while families in which a handy man presides over the home often display boxes in every way as well made and presentable as those procured from the Guild.

The window-boxes are not given away, but are sold merely for a price which the various gardeners can afford to pay. While the actual cost of a box is one dollar and twenty-five cents most of them sell for twenty-five cents, varying from this to the actual cost. The

applicants for window gardens come from various sources. All the settlements, church houses, district nurses and charity organization visitors are in close touch with the work, many of them receiving fruit and jelly as well as flowers from the Guild, so that it is almost entirely through them that the Guild draws its clientele. By these means, only those who are known to be appreciative are entrusted with the little gardens. It is for this reason that so few are allowed to run down. One stout Irish woman, whose box was found full of dead plants in the fall, burst into tears when the visitor called. "You see," she said, "my man neglected it while I was away in the country. I wouldn't have gone," she added apologetically, "but the baby was so sick, and next summer I'll not stir an inch."

Frequently, however, it is the man of the house who takes the most pride in the little home garden. Many times among those who can afford it, the husband will come home at night with a rose-bush or a fern or some other plant bought from a street vender, and then the whole family take part in the ceremony of planting it.

In many cases vegetables have been attempted quite successfully. Radishes, parsley, lettuce and even cucumbers have grown to flourishing maturity in these tiny boxes.

IT WAS only last spring that I was walking down Macdougal Street one morning and noticed a swarthy, olive-skinned Italian lad on the steps of a one-time mansion, now turned tenement, busily poking oats into the dirty cracks of the stone steps. I stopped a moment and noticed that down one side were already growing encouraging little green sprouts. I asked if he had planted those also, and learned that every day he picked up the oats that were dropped by the horses feeding from their bags, and planted them. Then when they came up he transplanted them into a paper shoe box which he proudly pointed out to me on the sill of an attic window.

"Theresa," he informed me, "got a real garden off the nurse, but I ain't sick so I made one." I looked around me, and verily Tony's box and tiny row of green blades were the only growing things my eyes could light upon in any direction.

A similar story of appreciation is told by a settlement worker who was making her way down Allen Street, the dingiest of all East Side streets, the darkest and most forbidding, when she noticed a little girl tracing a finger line around two grass blades at the foot of an elevated station pillar.

"You have a flower, haven't you?" she vouchsafed interestedly.

"'Tain't no flower, teacher," was the indignant protest, "here stands a park."

It is this instinct, from the smallest babe up, to hunt out some green growing thing and to cherish it, now half-starved, amidst only filth and barren asphalt, that the Fruit and Flower Guild is trying to keep alive.

In some tenements in the less congested portions of the city there is an occasional chance for a "sure enough" backyard garden, and it is here that the visitor of the Guild finds her proudest opportunity. The transformation of a rubbish heap to a bower of beauty must appeal to anyone, and in several cases this has been actually and literally accomplished, while in many other instances the metamorphosis is in process, and sunflowers and morning-glories are putting to rout all inclination to dump tin cans and ashes against the rear fence.

The work of the Guild has also another side. All through the summer cut flowers neatly tied into bunches or loosely packed into boxes are finding their way from country gardens into the hands of the tenement children.

Hundreds of bunches are every week gathered by those who wish to share their gardens and are sent to the New York settlements direct, where the evening of the same day, the tired, hot little children come in flocks just to possess, to hold in their own hands, to smell with their own noses, one little bit of the country they may not see.

It was on a hot August night last summer that I was dining at a settlement on the East Side. Throughout dinner the bell rang continuously, and one resident after another returned with the one final word "Bank." I asked if Bank was always so popular, or why such a hot night had been chosen for everyone to deposit or draw his pennies.

"Oh," said the friend with whom I was dining, "they saw the box of flowers come in and they can't wait."

A few minutes later, as each one transacted his business I was allowed to give him a nosegay.

Each child had a preference. I could see them as they stood in the line selecting special flowers on the big tray and hoping no one would take that one. As each one received his prize, I was interested to see the disposition made of them. Some selfishly crushed them to their own noses, others pushed them ecstatically against mine, while still others dashed off madly to show the bunch to a mother or sister at home.

THE RURAL SETTLEMENT: ITS SOCIAL, ECONOMIC AND ÆSTHETIC ADVANTAGES: BY C. H. FORBES-LINDSAY

N CONNECTION with its wonderful work of transforming the arid lands of our Western States, the Reclamation Service is carrying out a far-sighted plan for the reformation of the hardly less arid lives of the agricultural population of that region. We are fairly familiar with the engineering operations that are converting the desert waste—"dreary and vast and silent"—into tracts of smiling soil and luxuriant vegetation, but it is not generally known that this great economic enterprise involves the establishment of towns. These are to be placed at carefully selected sites in every project, and to be laid out and developed upon lines no less scientific than those regulating the irrigation works. The design of the Service, which is pursued under the express authority of Congress, extends beyond the reduction of the land to a condition of fecundity to the creation of homes and industrial centers in accordance with the most advanced ideas. The basal feature of the system is centralization—the very reverse of the condition usually obtaining in our agricultural communities. Although far from new as applied to a rural population, its practice among us has been confined to a few scattering sections of the country.

Town and country are economically interdependent and they should be closely allied industrially and socially. The principle involved in these almost axiomatic statements has been conformed to in Europe since the birth of the burgs from the feudal communities. So obvious is it that we see its recognition among primitive peoples who follow agricultural pursuits. The Zulu kraal and the Maori village, each surrounded by fields of crops or pasture runs, are not merely provisions for defence, but also agencies for the promotion of convenience, coöperation and social intercourse.

When Coronado and his adventurous followers broke upon the peaceful people of Mexico, they found the Pueblo Indians living, as their name implies, in permanent villages. The adobe huts were grouped about a central building, designed to serve as council house and, on occasion, as fort. Around this aggregation of habitations lay a circle of cultivated fields, with roads and irrigation ditches radiating from it in every direction. The Indian husbandman went out to his work each morning, returning at nightfall to his village home and the companionship of his fellow tribesmen.

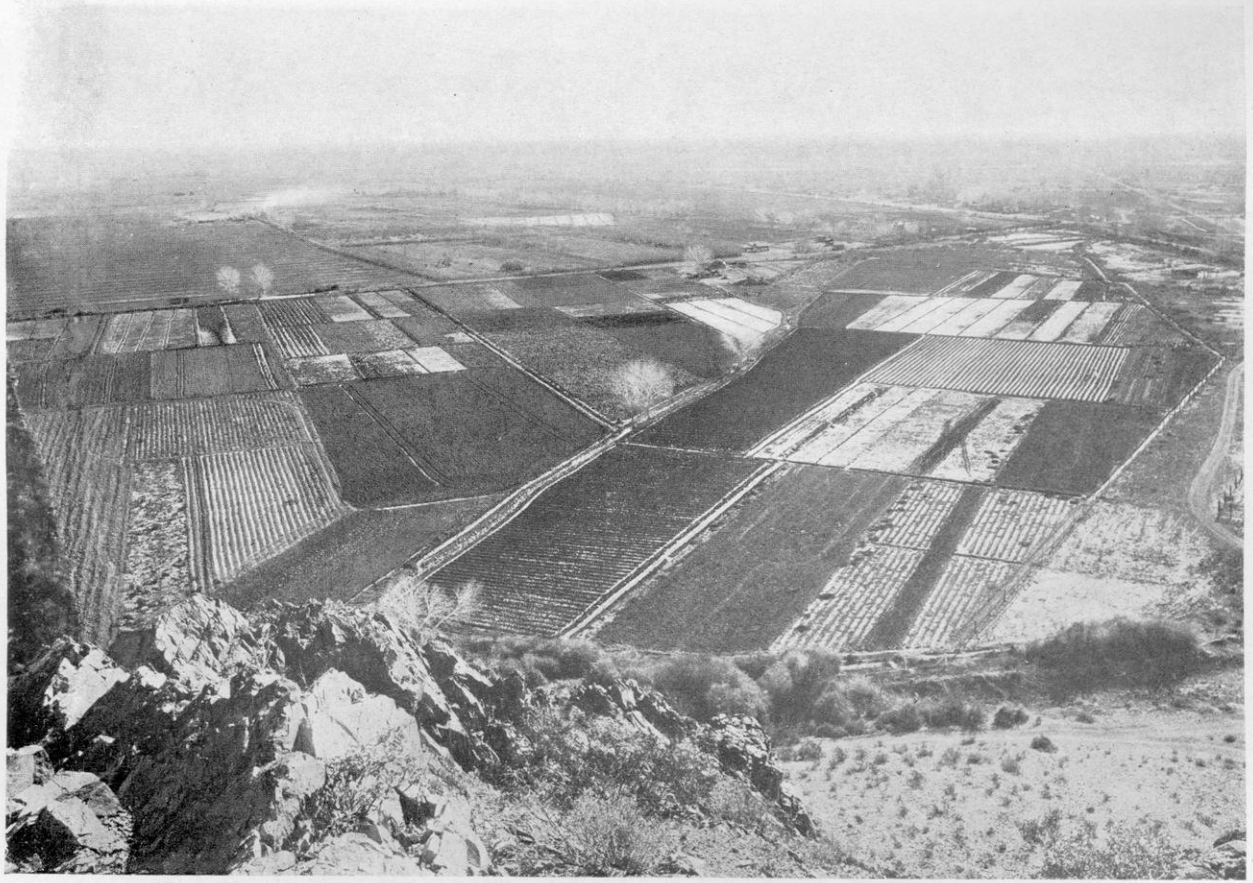
At a much later period, the Mormon settlers of Utah adopted a similar system of agricultural communities, each with a common urban center. But in their case the place of worship occupied the position in the town corresponding to that held by the fortified building in the Indian village, and the purpose of the arrangement was chiefly disciplinary. It was the policy of the church in its earliest days to keep its followers in sight and under the closest surveillance. Nevertheless, in the pursuit of this object important economic advantages were unpremeditatedly secured by the Mormon rural settlements.

In still more recent times, the idea of agricultural centralization has been carried to practical perfection in the orange districts of California. Redlands and Riverside are notable examples which have furnished the Reclamation Service with models for their townsite plans. The fruit growers live in these centers, which afford all the ordinary conveniences and comforts of urban life and are connected with the outlying orange groves by excellent roads. The happy blending in these communities of the most attractive features of town and country strongly impressed former Secretary Gates, on the occasion of a visit made a few years ago. He declared that their inhabitants more nearly attained to the ideal home life than any to be found elsewhere in America.

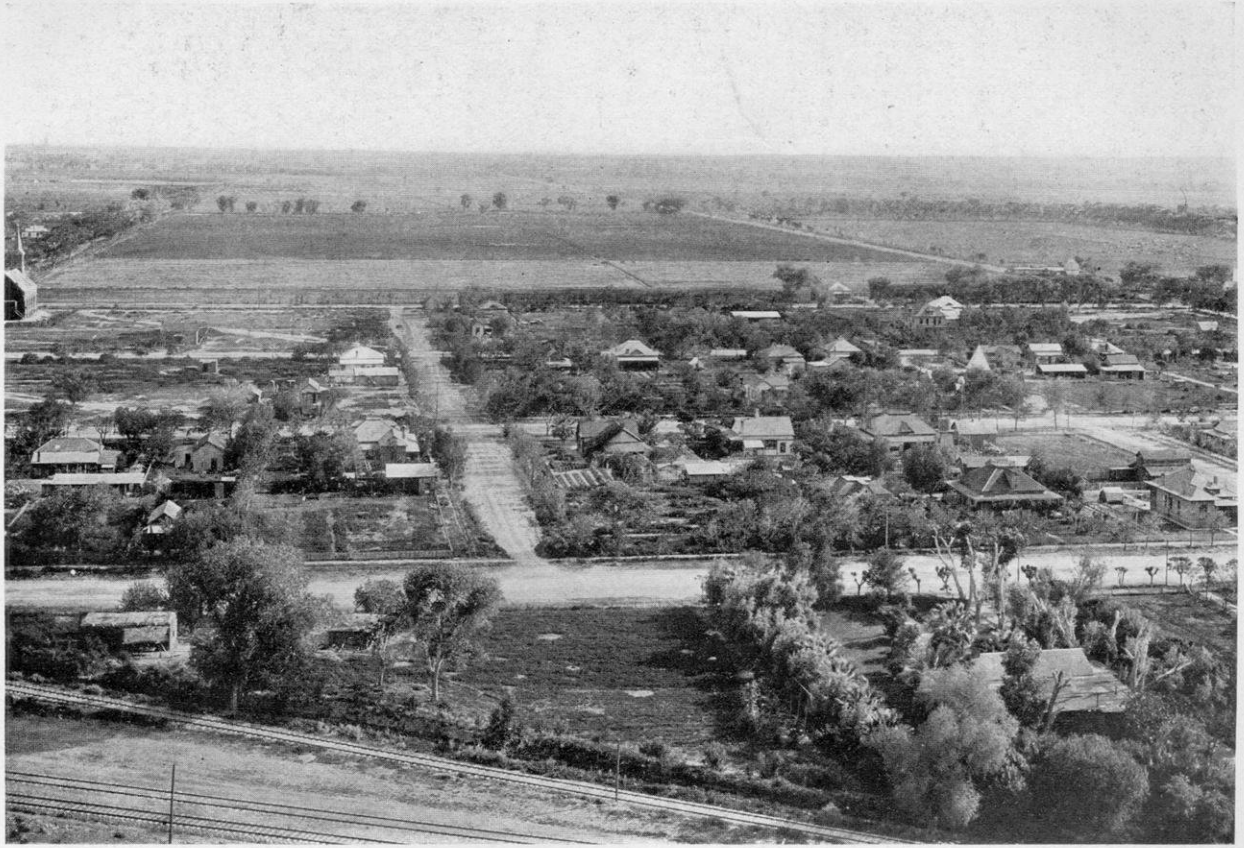
Isolated rural settlements are scattered here and there in various parts of the West, and in some of the Middle States the first step toward centralization has been taken by consolidating district schools and transporting pupils to a central graded establishment.

FOR an exhibition of the prosecution of rural centralization in a systematic and complete manner we must look to the large areas of arid land that the Reclamation Service are rapidly converting into productive soil. These tracts, in several instances exceeding three hundred thousand acres in extent, are laid out in holdings of forty and eighty acres. Town sites are located in the first surveys of the projects and are so distributed as to bring every farm within three or four miles of one of them.

The towns, which will contain populations of from one to five thousand, are laid out upon the plan presented in the accompanying chart. The thoroughfares are broad and regular, even the alleyways being thirty feet in width. The principal streets and avenues are continued out through the adjacent farm land until they merge into the highways radiating from neighboring towns of similar origin



CULTIVATED FIELDS ADJACENT TO A RURAL SETTLEMENT: EDGE OF THE DESERT IN THE FOREGROUND.



A RURAL SETTLEMENT IN ARIZONA: MANY OF THE FARMERS LIVE IN THE ADJACENT TOWN.

FARMERS' HOUSES IN A RURAL SETTLEMENT BUT EIGHT YEARS OLD.

A TROPICAL GARDEN
IN THE DESERT.

and plan. In the central position, corresponding to that occupied by the Indian stronghold and the Mormon temple, will stand the school building with the main roads converging upon it. Around this, along the sides of the public square, will be ranged the town hall, post office, public library, telephone exchange, telegraph office and fire station. Two blocks of the main street are planned to accommodate stores and business offices. The plaza itself will afford a playground for the children and a resort for their elders, as it does in Spanish-American towns. The inner portion of the settlement will be occupied by residences with ample yards and flower gardens, while the outer edges are marked off in larger lots for occupation by dairies and small truck farms.

The little red schoolhouse will soon be no more than a picturesque memory. The central graded school has such obvious advantages, and its introduction has met with such unvarying success, that its rapid establishment in all our agricultural districts is practically certain. It has been operated for several years with the most satisfactory results in Kansas. A bus service is maintained in connection with it for the purpose of carrying the children to and fro. The innovation has been followed by the most marked improvement in health and regularity of attendance. Representative Reeder, who is an enthusiastic supporter of the system, lays great stress upon the moral effect of a teacher in each of the conveyances. This arrangement insures the children proper guardianship while absent from their parents and curtails the opportunities of the "bad boy," whose malign influence is most frequently exerted on the road to and from school.

The central graded school permits of the employment of a better class of teachers and of the establishment of a more extensive course of study. It is found that the cost of supporting it is little more, in the case of the individual farmer, than the expense of maintaining the small district school, with its distinctly inferior benefits. In connection with the rural settlements of the Reclamation Service, the system of central graded schools can be carried on with the maximum of economy and effect.

THESE rural settlements will enjoy not only an unlimited supply of good water for drinking and domestic purposes, but in most instances the irrigation works will furnish power for a great variety of uses. Electric railroads will be installed, connecting one town with another and affording ready access to all parts of the farming district. Aside from the convenient passenger service, such roads

will act in the more important capacity of freight carriers, conveying merchandise and machinery to the farms and hauling produce thence to the shipping points. The farmer will be supplied with power to operate his agricultural machinery, and his wife with power to run her churn or her sewing machine. The settlements will be lighted by electricity. The same force will be employed in their industrial plants and in their homes, for heating and cooking.

The Western farmers are quite alive to the economy and convenience to be derived from the use of electricity. On the Minadoka project, where the power-house is in operation, eighty-five per cent. of the farmers have subscribed to the service, which is furnished to them at a fraction above cost. It is worthy of note that the source of all these public utilities will in every case be in the hands of the people, for the Government is pledged to turn over to the landowners the entire irrigation systems, with the exception of reservoirs, ten years after their completion.

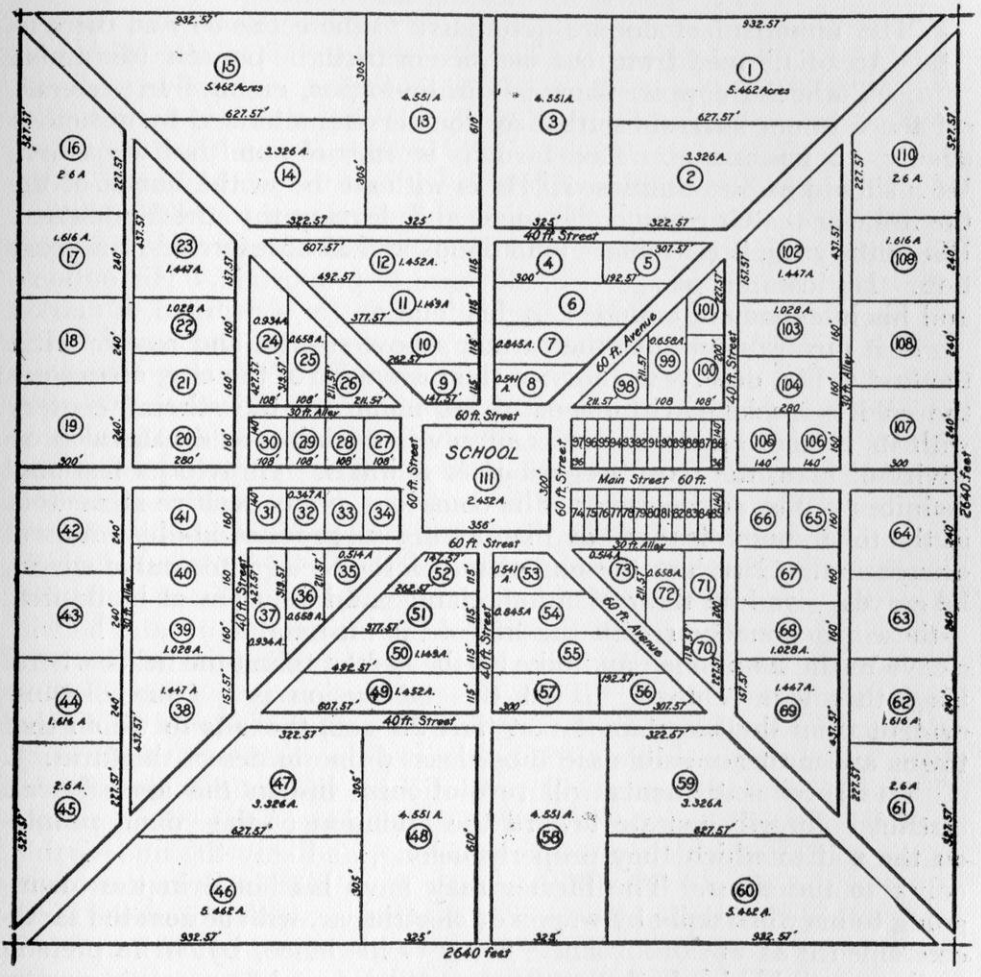
Each settlement will be a logical station for a railroad, a market for the farmer's produce and a shipping depot for the buyer. The centralization and community of interests will effect many economies which it is impossible at present to particularize and will enable every farmer to enjoy conveniences and comforts that would otherwise be beyond his reach. Not the least of these will be improved professional services. The settlements will become the permanent residences of lawyers, doctors, dentists and veterinary surgeons of ability who will displace the itinerant quacks that infest the agricultural districts. With the concentration of the demand, a better class of craftsmen, too, will make themselves available to the farmer.

Next to the home, the three great social institutions of the rural districts are the church, the school and the grange. None of these is extending anything like the degree of benefit that should be derived from it and this in each case is because of the scattered constituency. Upon the rural settlement plan all of these institutions are afforded greatly enlarged scope for activity and influence, while their maintenance is effected with increased economy.

Our agricultural life differs greatly from that in European countries, where the farmers live mostly in villages, and the isolated farmhouse is the exception. The difficulty experienced by our farmers in getting help is largely due to the fact that hired labor in the country is almost exclusively performed by single men, and necessarily so. Very few farms have dwellings to accommodate the families of laborers. This not only militates against the employment of a married man

but also operates against the permanency of the unmarried. When one of the latter takes a wife, he is generally compelled to engage in other work. And this is one of the potent causes for young men leaving the country.

The rural settlement greatly simplifies the labor problem. The



MAP NO. 8197 U. S. G. S. MAY 1906

RECLAMATION SERVICE

PLAN FOR RURAL SETTLEMENTS

AUTHORIZED BY ACT OF CONGRESS APPROVED APRIL 16, 1906

PUBLIC NO. 106

farmer may reside in the town and have a married helper living on the land, or the helper may live in the settlement, and go out to his work, in case his employer occupies the only house on the farm. The latter arrangement would usually prove convenient, because the farmer would naturally be glad to establish daily communication with the urban centers.

THE aphorism of John Burroughs: "Where the cow is, there is Arcadia," might without sacrifice of truth be paraphrased thus: Where the cow is, there is accidie-torpor, ennui. In general, existence in our sparsely settled sections is characterized by the most deadly commonplace. The farmer is narrow and self-centered. How should he be otherwise? He is without the world, cut off from the influences that expand the mind and develop the social qualities. His solitary life is toilsome, monotonous and almost devoid of relaxation. He loses all perspective, all sense of proportion. His outlook and his interests are bounded by his fences.

Is it any wonder that the farmer's boy, strong, and restive with the lust of life, deserts the soil for the pavement of the city, abandons the cold, unsocial environment of his home for the stirring center, with its human appeal? He is simply responding to a natural proclivity of man, the most gregarious of animals. He seldom has any definite purpose in view, nor is he conscious of any positive attraction in the town, much less of any distinct dislike to following his father's occupation. Give him the opportunities for social intercourse which he craves, give him the relaxation, change and amusement he desires —these in connection with the life of the husbandman—and he will cleave to the homestead and take up the task of tilling the fields where his father lays it down. That this conclusion is justified seems evident from the ascertained fact that the country lads to whom the towns are most accessible are those least prone to desert the farm.

The rural settlements will revolutionize life in the agricultural districts. It will operate toward the retention of the young people on the soil to which they properly belong, and stay the undesirable efflux to the cities. The farmer may have his home in the town, going to his work daily by wagon or electric car, with almost the same convenience as the suburbanite going to his office, but if he prefers to live upon his land, the settlement will be readily accessible. Its school may be easily reached by his children and his family may take part in its social life.

SHOULD THE ART STUDENT THINK? BY PAMELA COLMAN SMITH

ALL you students who are just beginning your work in an Art School. Stop—think! First make sure in your own mind what end you wish to work for. Do you know? Perhaps you have not decided. You will leave all that to the time when you have learned to draw and leave the school—a crippled tool—ready to begin your serious work and have a studio—and all the rest of it. Do not wait till then! Put in a corner of your mind an idea—such as, "I wish to paint portraits." Just keep that idea in the corner, and do not forget that it is there. Call it up sometimes and review your work in front of it. Thus—"Am I working at the right beginning for this branch of art? Am I studying the faces of all the people I see—trying to find out their character—imagining how I should paint them if I were to do so? Am I trying to show more of their character than appears on the surface? Can I see it? No. But how shall I find it?" Look for it.

When you see a portrait of an historical person, note the dress, the type of face; see if you can trace the character in the face; note the pose, for often pose will date a picture as correctly as the hair or clothes. Remember the date, if the picture is dated; if not, place it in your mind as second half of the fourteenth century, or first half of the eighteenth, and so on. If you are not sure of the period, make a pencil sketch and take it with you to some reference library. Once a week make a point of looking up all the clothes you have seen (or wish to draw in some composition, perhaps). Some day when you may have a novel to illustrate and a character to portray, you will remember, "Oh, yes, a dress of the kind worn by so and so in the portrait by so and so—that type—or—no! Somewhat more lively."

Go and see all the plays you can. For the stage is a great school—or should be—to the illustrator—as well as to others. First watch the simple forms of joy, of fear, of sorrow; look at the position taken by the whole body, then the face—but that can come afterward.

As an exercise draw a composition of fear or sadness, or great sorrow, quite simply, do not bother about details now, but in a few lines tell your story. Then show it to any one of your friends, or family, or fellow students, and ask them if they can tell you what it is meant to portray. You will soon get to know how to make it tell its tale. After you have found how to tell a simple story, put in more details, the face, and indicate the dress. Next time you go to the play look at the clothes, hat, cloak, armor, belt, sword, dagger, rings, boots,

jewels. Watch how the cloak swings when the person walks, how the hands are used. See if you can judge if the clothes are correct, or if they are worn correctly; for they are often ruined by the way they are put on. An actor should be able to show the period and manner of the time in the way he puts on his clothes, as well as the way he uses his hands, head, legs.

THIS may be beside the mark, think you! "Of what use is the stage to me? I am to be an illustrator of books! The stage is false, exaggerated, unreal," you say. So are a great many pictures in books, and the books, too, for that matter. The stage has taught me almost all I know of clothes, of action and of pictorial gestures.

Learn from everything, see everything, and above all *feel* everything! And make other people when they look at your drawing feel it too!

Make your training at your art school your a b c. You must learn to hold a brush, to mix paint, to draw in perspective, and study anatomy.

Keep an open mind to all things. Hear all the music you can, good music, for sound and form are more closely connected than we know.

Think good thoughts of beautiful things, colors, sounds, places, not mean thoughts. When you see a lot of dirty people in a crowd, do not remember only the dirt, but the great spirit that is in them all, and the power that they represent.

For through ugliness is beauty sometimes found. Lately I have seen a play, ugly, passionate, realistic, brutal. All through that play I felt that ugly things may be true to nature, but surely it is through evil that we realize good. The far-off scent of morning air, the blue mountains, the sunshine, the flowers, of a country I once lived in, seemed to rise before me—and there on the stage was a woman sitting on a chair, her body stiff, her eyes rolling, a wonderfully realistic picture of a fit.

I believe that in the so-called "composition class" the future of many a student lies. (Professor Arthur Dow, of Columbia University, has proved this, and through his influence I believe a good many schools have begun to teach composition first.)

But let the student begin young, and with all the necessary aids for the broadening of his mind. Composition first, and all the other rules and rudiments, in order as they come. As much literature,

music, drama as possible (all to be thought of in relation to that idea so safely tucked away in the corner of the student's mind), to be worked at from the vantage point of knowing what they are to aid.

I wish here to say how grateful I am to the writer of an article in an American magazine (*Putman's Monthly* for July, 1907). "An Appreciation and a Protest." An appreciation of Albert Sterner, and a protest against the "ultra-sweetness and oppressive propriety admired alike by the publisher and the public," and "individuality discreetly suppressed."

O! the prudishness and pompous falseness of a great mass of intelligent people!

I do not hold that "the incessant roar of high-power presses" is alone to blame for the stifling of life, but for a lack of inspiration. For it is a land of power, a land of unkempt uproar—full of life, force, energy.

Lift up your ideals, you weaklings, and force a way out of that thunderous clamor of the steam press, the hurrying herd of blind humanity, noise, dust, strife, seething toil—there is power! The imprisoned Titans underneath the soil, grinding, writhing—take your strength from them, throw aside your petty drawing room point of view.

I do not want to see riotous, clumsy ugliness suddenly spring up, but a fine noble power shining through your work. The illustrations that I see in the magazines by the younger people are all dignified and well, carefully and conscientiously drawn, but their appalling clumsiness is quite beyond me,—their lack of charm and grace.

I do not mean by charm, *prettiness*, but an appreciation of beauty. Ugliness is beauty, but with a difference, a nobleness that speaks through all the hard crust of convention.

I have heard it said that half the world has nothing to say. Perhaps the other half has, but it is afraid to speak. Banish fear, brace your courage, place your ideal high up with the sun, away from the dirt and squalor and ugliness around you and let that power that makes "the roar of the high-power presses" enter into your work—energy—courage—life—love. Use your wits, use your eyes. Perhaps you use your physical eyes too much and only see the mask. Find eyes within, look for the door into the unknown country.

"High over cap" on a fairy horse—ride on your Quest—for what we are all seeking—*Beauty*. Beauty of thought first, beauty of feeling, beauty of form, beauty of color, beauty of sound, appreciation, joy, and the power of showing it to others.

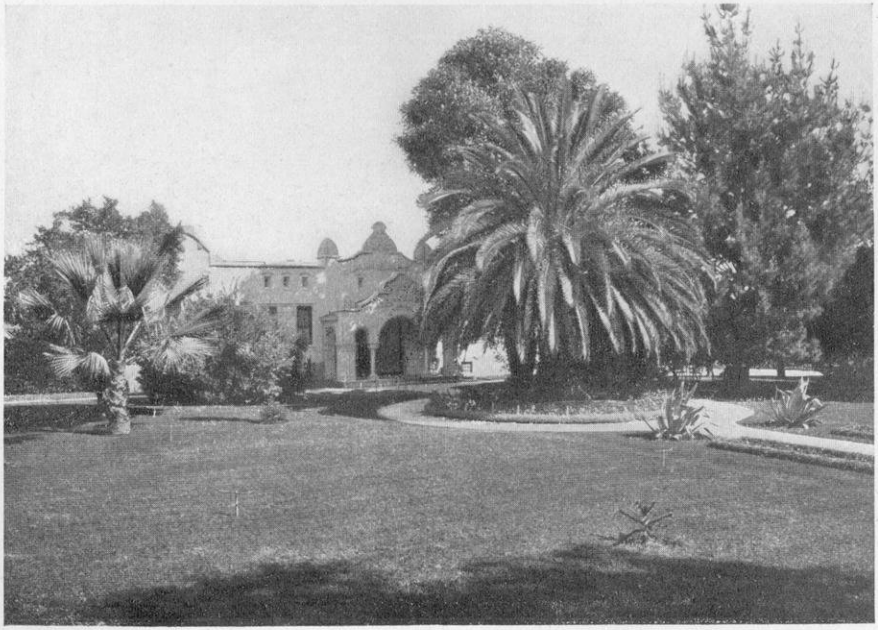
PLASTER HOUSES IN THE SOUTHWEST: BY UNA NIXSON HOPKINS

THE plaster house in America is a composite reflected of plaster houses in all countries, and, as a result, has many delightful features. Its popularity in the past few years has increased at a surprising ratio. The reasons are not far to seek: plaster houses are warmer in winter and cooler in summer than those of wood. Further, the high price of mill work no longer makes the frame house cheaper, so that the plaster house is not at a disadvantage from an economical standpoint. Then, too, people are learning how to build them. Every one who goes abroad, for instance, is more or less influenced, when he comes to make a home, by his observations. It may be the Elizabethan half-timbered houses of England have appealed to his particular fancy, or that the villas of Florence are the type which he wishes to reproduce for his own, or, possibly, the rambling houses of Spain, with their picturesque courtyards, have taken a special hold on his imagination. Those who have seen Southern California with its wealth of architectural specimens know that the plaster house shows all these influences as well as an occasional marked originality.

The Pompeiian plaster house which one seldom, if ever, sees in the Eastern States, appears quite natural in the tropical setting of our Southwest. A number of these houses are situated in the midst of orchards, a good deal of space being necessary for their construction to satisfy their rambling propensities. Built around an interior court, or atrium, which serves as a distributing point for other rooms, they are picturesque in the extreme. A fountain plays according to tradition and tropical plants border this central room, luxuriously. The light comes entirely from above, and the ventilation is manipulated by small windows that form a sort of frieze. In some of the houses the atrium is floored with cement, places being left for plants. From the atrium you go up one step to a platform that bounds the atrium on four sides, and from this you enter the various rooms of the house. The front door, which commands a wonderful view of this novel interior, also opens on the court. In others the central space has been filled in with dirt, the plants growing as if out of doors. These houses might be adapted for summer homes in the East, and possibly for all the year round, but it is doubtful whether houses covering so much ground would be altogether practical when it came to the matter of heating, though it is possible. It would be difficult to find anything in domestic

HOUSE IN PASADENA SHOWING SARACENIC INFLUENCE.

THE TILE ROOF IS THE USUAL COMPLEMENT OF A PLASTER HOUSE.



PLASTER HOUSE SHOWING STRONG MOORISH INFLUENCE.

THE POMPEIIAN PLASTER HOUSE IS ESPECIALLY ADAPTED TO THE TROPICAL SURROUNDINGS OF THE SOUTHWEST.

PLASTER HOUSE BUILT WITH OUT-DOOR LIVING ROOM.

THE PLASTER COTTAGE WITH STONE FOUNDATION HAS BECOME A FAMILIAR SIGHT ON THE PACIFIC SLOPE.

PERGOLA AND COURTYARD OF COTTAGE SHOWN ON PRECEDING PAGE.

architecture more romantic than the Pompeiian house, especially in the evening when the fountain is playing softly and lights everywhere are turned low.

A tile roof is the usual complement to the plaster; though shingles are often used, they are not so suitable. The cement house conveys the impression of strength and calls for the same qualities in all its various attributes, including the roof. From the standpoint of color the red tile is perfection in connection with the natural color of the plaster, or when slightly tinted. The tin roof painted to simulate tile is a poor makeshift and not to be recommended—shingles are in much better taste.

The environment of these houses is always important; they need space about them and without it lose much of their charm. Several plaster houses close together or a plaster house intruded close between two of frame is apt to look hard and bare. To be successful they must be simple in line and almost entirely without ornament.

Where the foundation of these houses shows it is preferably of cut stone or of cobblestone, either of which combines better with plaster than does brick. But it is quite as well, when possible, to let the cement run to the ground, so that no other material is in evidence.

When it comes to details, it is interesting to have the trim,—door and window sashes, etc., rustic. As to color, there is nothing more satisfactory than a soft, warm brown; the contrasting color in such small quantities gives the desired character.

The house with the courtyard encompassed with repeated arches is trimmed with a pinkish-buff, very like the house paper, but a shade or two lighter. This house has plenty of space about it and since the picture was taken the vines have grown to such an extent about the arches as to afford a screen so that the family occupy it in summer as an outdoor sitting room without fear of intruding glances from passers-by. The living room runs through the center of the house and opens on the south into the court—where there is a fountain—and on the north onto a veranda by glass windows, thereby giving entrance or exit at either end of the main room as well as from the entrance hall in front.

The house among the illustrations showing Moorish detail is so restrained as to make it a suitable neighbor to plainer, simpler dwellings. Detail of the sort employed here is necessarily expensive, as the carving and coloring must be done by a master hand, or it becomes bizarre and vulgar. The foundation of cut stone is a good beginning, and the central tower is so located and the wings so distributed as to create lines pleasing to the eye, which combined with subtle coloring makes an architectural picture.

The home of Mr. Robert J. Burdette, situated on the famous Orange Grove Boulevard, Pasadena, suggests slight Saracenic influence. It stands on the crest of a hill and is appropriately called Sunnycrest. The plaster is the natural gray color, relieved by warm brown trimmings, with a tile roof of dark red.

The cottage pictured is a good illustration of what may be done in small plaster houses. Even with such heavy material there is a certain picturesqueness. On analysis it will be seen that much ingenuity was brought to bear in the designing of this house. It is a pity that the rear does not show in the picture, for a pergola adds materially to the western view. In fact, the designing of plaster houses taxes the ability of the architect more certainly than the designing of those of wood, but there is sufficient satisfaction in the successful accomplishment to justify the effort.

DESIGN IN THEORY AND PRACTICE: A SERIES OF LESSONS: BY ERNEST A. BATCHELDER: NUMBER X

"Conventionality in ornament is the natural consequence of reticence or self-restraint, of doing, not all that the artist could have done, but just what is called for by the occasion." —*Lewis Day.*

IN the last article it was said that there were two methods of developing a surface pattern; one by starting with the details and working toward the whole through the building up of related lines and forms in space and mass; the other by striking at once for the big things and gradually breaking the measures of space and mass to the last details. But, though the methods differ, the aims are the same,—a unity of all the elements involved. The first method is valuable for experimental purposes and should precede the second in the study of design, as it is a logical development from simple to more complex questions. But it should lead to an ability to design by the other method. It is always desirable to work from the whole to the parts, to plan the big relations and forms first, and then, to the idea thus expressed, relate the minor details. In actual practice one often combines both methods,—as, for instance, in the little rabbit design of last month; in that, the unit was made by the second method of working, though without thought of its being used in a repeated pattern. Its general shape and measure were established first; then it was broken into related lines and forms suggested by the rabbit. With the unit thus made a number of experiments were tried in an effort to secure the best possible adjustment of space and mass relations in the repeated pattern.

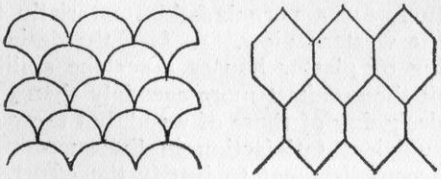


FIGURE SIXTY-FIVE.

It is now proposed to discuss the development of a pattern by the second method (Plate 56). A greater degree of skill and judgment is demanded than before. This is a rhythmic design of black and white elements, in which the white is of dominant interest, but in which the distribution, the shapes and measures of black have demanded an equal amount of care. A description of this method of working with illustrations showing the evolution of the design from its first idea may be interesting and profitable. It may well be assumed that the method is in accord, aside from questions involved in the technique of weaving, with that pursued by the designers of the old textiles, shown in the April and June numbers of THE CRAFTSMAN. We may be sure that they worked from the whole to the parts, from big, general forms to specific details. They had learned to think in terms of design, and nature stood always at hand to strengthen their imaginations and suggest details that would add the final touch of life and interest to the work of their hands. We do not care to ask whether their designs are "based on the rose," or any other particular specimen of natural growth. They are beautiful

FIGURE SIXTY-SIX.

FIGURE SIXTY-SEVEN.

in all that counts for unity in design. They are based on a sympathetic observation of nature and not on a painstaking analytical study of natural forms, as in so many of the conventionalizations of the modern worker.

The present design represents a problem of an abstract character into which nature enters as fiction rather than as fact. If it has any style, it is the result of a thoughtful adjustment of tones, measures and shapes, in accordance with the few simple principles that have been defined. It started with this motif,—two birds and a nest. There was no restraint imposed by an adherence to the specific character of any bird or nest. It seemed better to allow the forms of the motif to develop as the demands of sound construction might suggest, leaving something for the imagination.

With this thought in mind, the main construction lines were established first of all (Plate 54). To insure a regular repetition of a motif a geometric constructive basis must be accepted as the first element in the problem. Two geometric bases of a repeating character are shown in Fig. 65. In the completed design this geometric basis may or may not appear to the casual observer. During the development of a pattern other interrelations of line and form, constructive in character, may be emphasized and the original basis subordinated or even lost entirely from sight. In this example, though, the original basis remains as a distinctive feature in the result. The next step was to seek a few tentative lines to define the forms and positions of the birds, their relation to the big movement and to each other. The tails were planned to cross the line of this movement in order to break its monotonous length.

The succeeding steps are shown in Plate 55. The birds were given a more distinctive character; a forecast of the tone distribution was made; each additional line was related to the other lines. The size and form of the mass represented by the three eggs were assumed and the space of black below this mass was broken by the two simple leaf

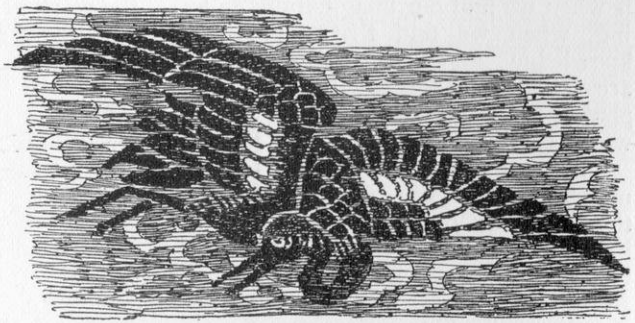


FIGURE SIXTY-EIGHT.

FIGURE SIXTY-NINE.

forms. Several experiments were tried with the nest; but the most consistent treatment of this element led to the adoption of an abstract symbol. It was a question to be solved on a design basis, not through a study of birds' nests. Then came the breaking of the large measures of white into related details, and a binding together of the lines of the movement by the twisted leaf stems. In the final breaking up of the forms, such things as are shown in Figs. 66, 67 and 68, Flemish, Italian and Japanese textiles, and in Fig. 69, some bits of Japanese metal work, may be studied with profit. In these it is less a problem of wings and feathers than of space and mass; not so much a question of nature as of tools and materials. The best time to go to nature is when we find our imaginations faltering, when we find that our general knowledge and observation are inadequate for the completion of the idea with which we started.

Thus we have a result that may serve to again illustrate the difference between thinking in terms of design and in terms of nature. It is this form or method of thinking that one should aim to acquire. A painstaking study of nature, an accumulation of facts, will not necessarily lead to orderly thought in design or to constructive beauty with tools and materials. The character of the design is within us. There is no reason why one should not make a record of facts of natural growths and forms in pencil, pen and ink, and color. But without proper digestive assimilation, those facts, however interesting they may be on their own account, are of little use. The designer must be a keen observer of nature,—but a sympathetic observer withal. We too often expect to find *in* nature the very things that we should take *to* nature. We too frequently approach her with a scalpel and a microscope, thinking that we may find weird and unique forms that no one else has ever used in design, thus stamping our work with peculiar distinction. We analyze the wing of a fly, hoping to find there material of some sort that is ready-made for purposes of design without the interplay of imagination and invention.

To illustrate this point let us compare the work of two carvers who were probably about contemporaneous in point of

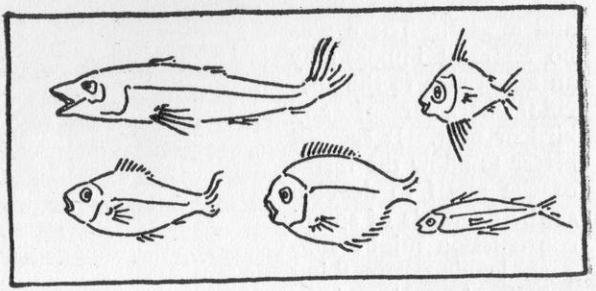


FIGURE SEVENTY.

time but widely separated in aims and methods (Plates 57 and 58). The first is the work of a Renaissance carver, the second of a Japanese carver. Each is fairly representative of the ideal toward which the craftsmen worked. If there is any distinction in words, the first might be called elegant, the second beautiful. Each is a piece of consummate craftsmanship, perfect in execution and finish.

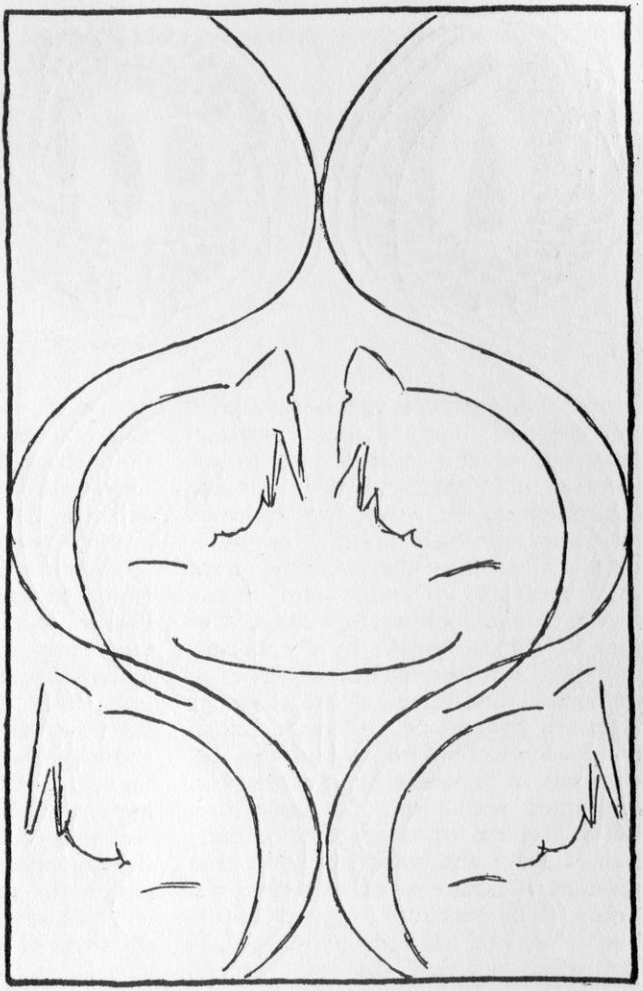


PLATE FIFTY-FOUR.

The first is a bit of descriptive carving, an accumulation of facts of observation expressed in wood with remarkable skill. The foot with its hair and claws is wonderfully carved, leaves are exquisitely turned, feathers delicately executed. But the carver's imagination did not rise very far above facts of form and texture. His hand was sure in the execution of such things. But he had very little to say beyond that. Lacking a sympathetic imagination, he sought to give distinction to his work by elegance of lines and an incongruous association of forms. In the history of design, the surest evidence of a declining imaginative power is to be found in this hashing together of unrelated facts and forms. This style of work, of which the carving here shown is a comparatively sane example, went, in times of later decadence, to absurd extremes.

In the second example, though, there is evidence of feeling, emotion, imagination of the highest order. We may admire the technical excellence of the first; but in the second our interest is in the idea which the carver has sought to express. He, too, must have known all the facts of his motif, he was a keen observer; but he did not choose to tell all that he knew. It was the spirit, the poetry of nature that appealed to him,

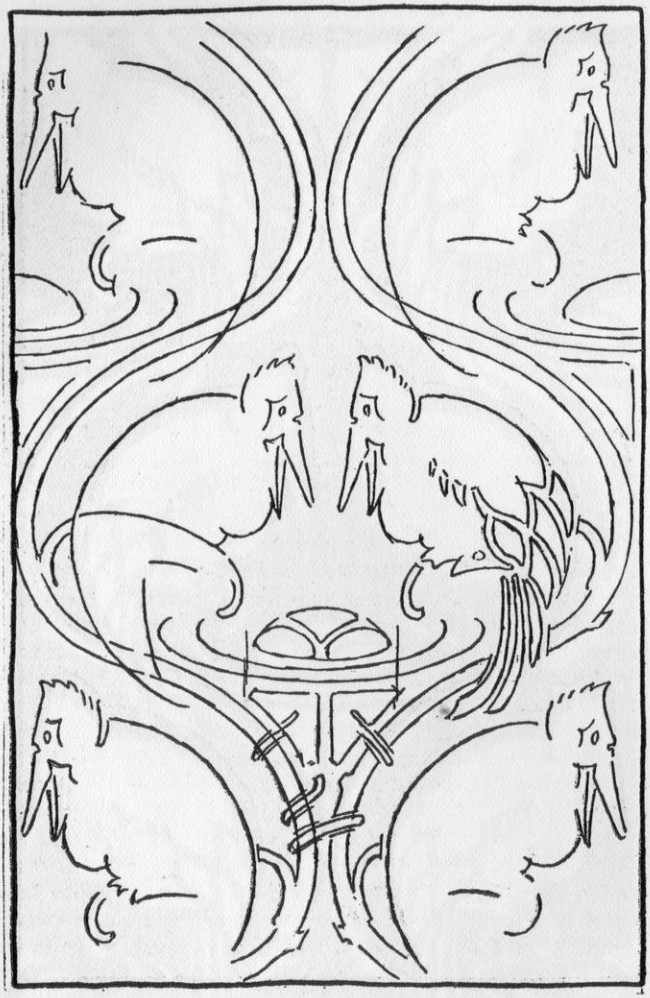


PLATE FIFTY-FIVE.

the charm of the Mother Carey's Chickens flitting back and forth through the wave crests. To him the birds and the water became symbols, a mere means to an end, for the expression of rhythmic movement. He sought an arrangement of lines and forms that would give true character and style to his idea. Note the beautiful line relations throughout, between the birds and the water, the consistent simplicity of all the details.

Similar in character and purpose are the Japanese carvings in Plates 59 and 60. These things have real "soul stuff" in them of a sort that comes from a sympathetic understanding of nature. The strong personality of an artist is carved into every line and form. It may be said that Plate 60 is too plastic in treatment for a wood carving. One must see the original (Boston Museum of Fine Arts) to fully appreciate the technical qualities of the work. Every line and plane is turned to make the most of the grain and texture of the wood. Moreover, as this carving was to be exposed to the weather, the craftsman foresaw the part that Father Time would play in his work and so adjusted his planes that storm and sunshine should enhance its beauty.

Problem:—This is another problem of the same character as many that have preceded it. Its purpose is the same,—namely, an adjustment of elementary forms into which nature enters to impart additional animation and interest to a definition of simple principles. By the use of symbols such as are here indicated, one should in time acquire the ability to think in terms of design whether or not nature enters into the

question. The motif of this problem may be stated in two words—fish, water. The aim of the problem—to arrange these symbols within an enclosing form in such way that the various attractive forces will be rhythmically related in positions of balance. Before attempting a solution of the problem it would be well to refresh the memory by a reference to the abstract demonstrations that defined the ideas of rhythm and balance in a previous number of THE CRAFTSMAN. And a statement there made will also bear repetition, — the artistic interest in the result depends largely upon an appreciative application of the principles, rather than upon a mere understanding of the formulæ through which they were described. Months ago we started to play our tunes on a primitive reed flute of a few simple notes. The range of possibilities of this instrument is now increased to the point where the personal equation becomes the important factor in the result. Imagination, and the ability to play under the restraint of orderly thought, will determine whether these little compositions shall be interesting and artistic or deadly formal and prosaic.

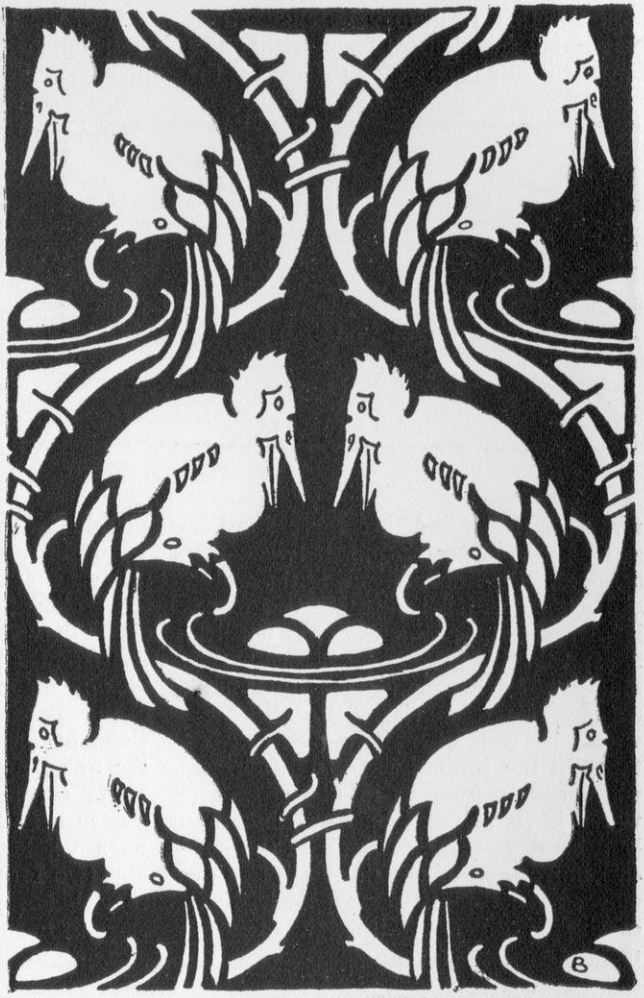


PLATE FIFTY-SIX.

The character of the symbols for the problem are indicated in Fig. 70. They are fishes reduced to the fewest possible lines. To these may be added others based on an intimate study of fish life, or made from the imagination on a basis of general knowledge of such forms. It is desirable that there should be variety in the shapes and measures of the symbols. As a start toward the solution of the problem, the size and shape of the

enclosing form should be established, although this form may be changed as the design develops. Then within this form it is our purpose to so arrange the terms of the motif that there shall be a rhythmic interrelation between the fishes and the lines indicating the water, and a balance of all the attractive forces involved in the problem. It is needless to say that this balance must result from sensitive feeling and good judgment, not from mathematical calculations. It would be well to make a first attempt through the limitations of a black and white composition, as in Plate 61. The water is represented by lines that may be used to strengthen or check the general movement of the design. The eye moves most rapidly along parallel lines, or slightly diverging lines that tend to meet at a common point.

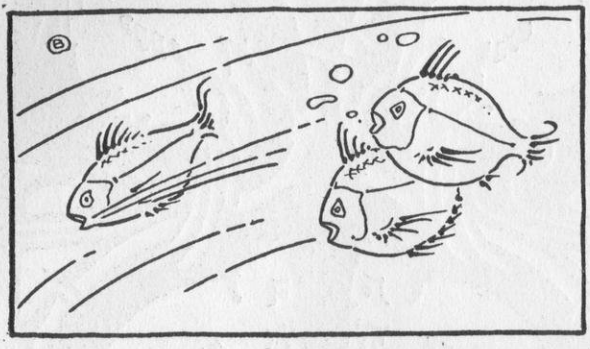


PLATE SIXTY-ONE.

With the addition of two or more values, the possibilities of the problem, and, by the same token, its difficulties increase. A greater number and variety of attractive forces call for attention. The different tone contrasts that arise must be dealt with; lights are to be broken with darks, darks with lights. Until one has given thoughtful attention to the solution of a problem of this kind, it is hard to realize the variations that may be given a composition of two or three flat tones. Let us attempt nothing of a pictorial nature. These are *designs*, not pictures.

As self-criticism is one of the chief aims in the study of design, it would be well to enter into a more detailed account of the three solutions of the problem, shown in Plates 62, 63 and 64. Unity was the first consideration, a consistent relation of *all* the forces, a *reason* for each. Variety was sought in the shapes, measures, tones and positions of the different elements. Note the grouping of the three little fishes in Plate 62, and the contrast in shape, measure and tone between this group as a whole and the single large fish. The two forces are related in movement though not pointed in the same direction. There is more variety, though quite as much unity, in the movement

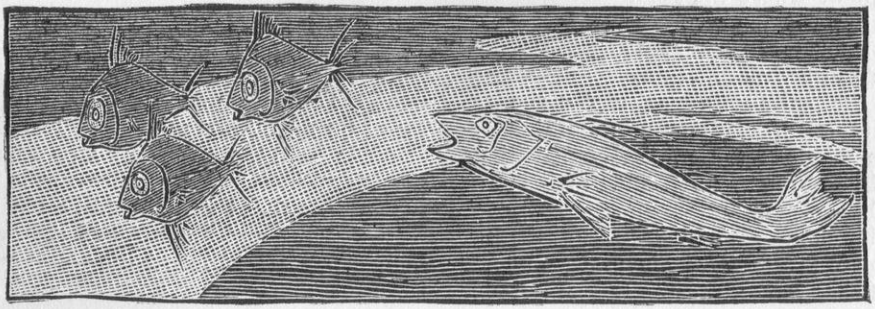


PLATE SIXTY-TWO.

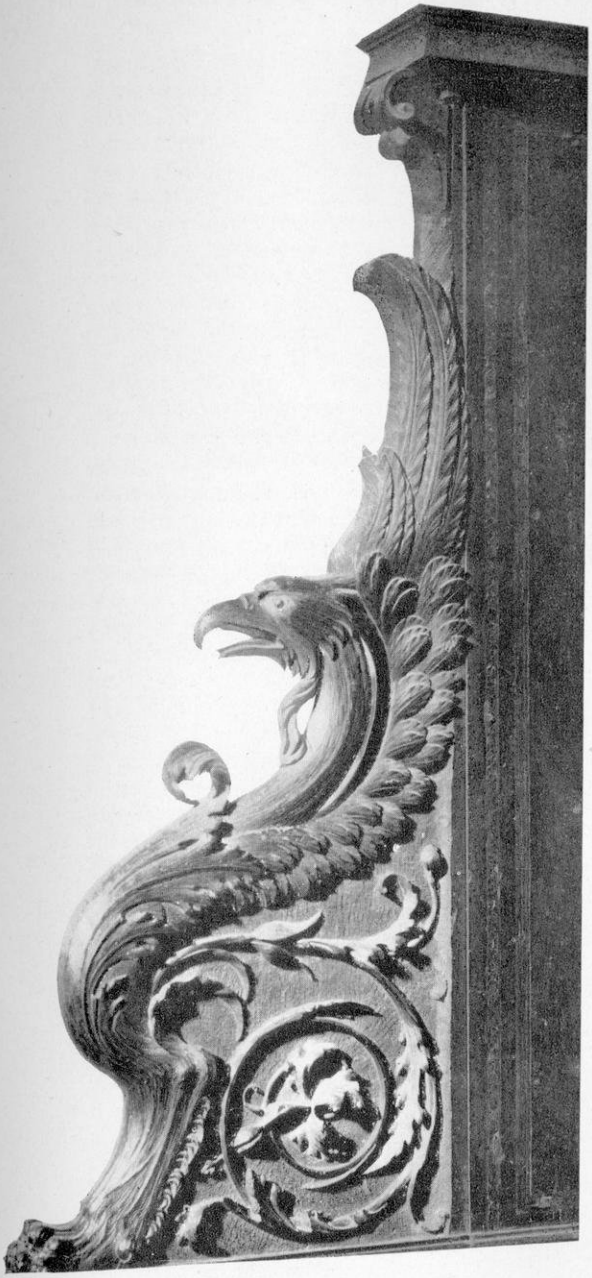


PLATE FIFTY-SEVEN.

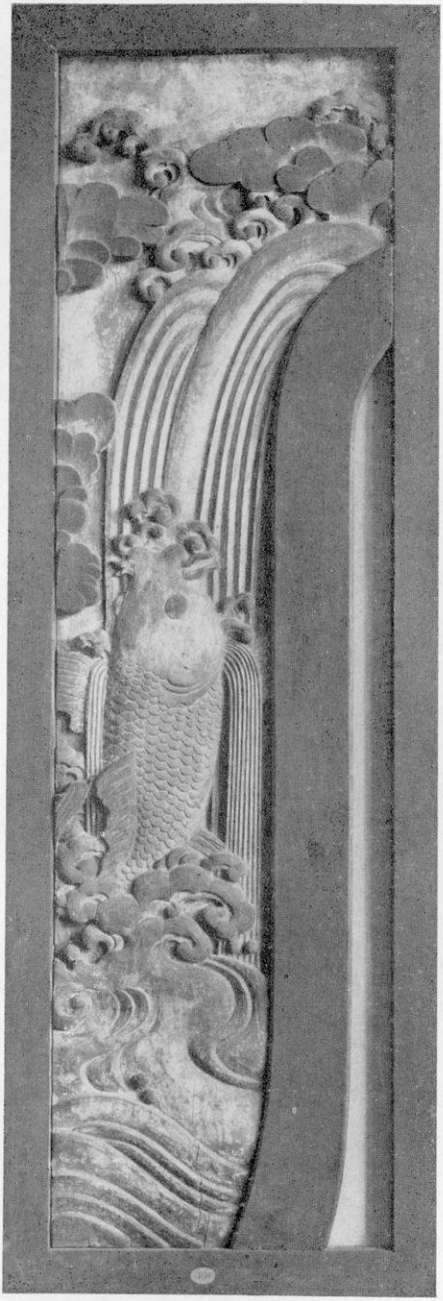


PLATE FIFTY-NINE.

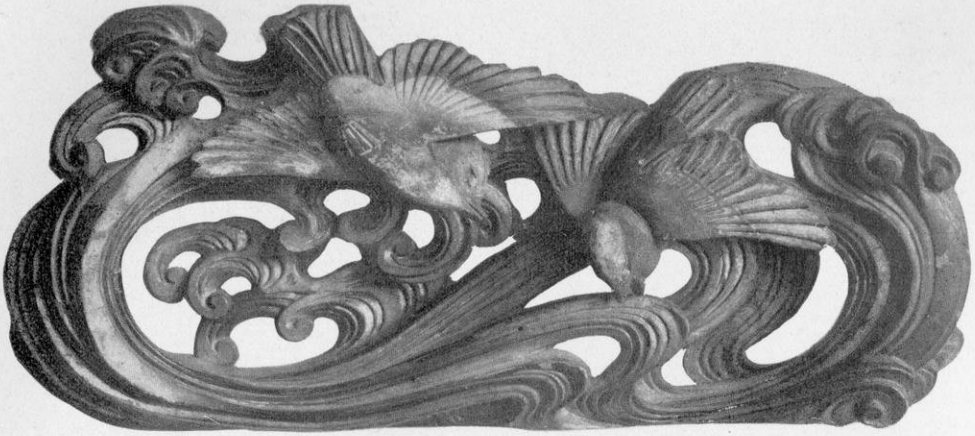


PLATE FIFTY-EIGHT.

PLATE SIXTY.

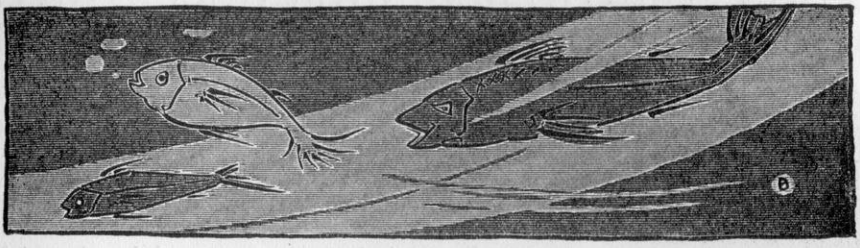


PLATE SIXTY-THREE

of the elements in Plate 63. In the third example the movement of the water adds a touch of variety to a result in which the fishes follow parallel lines. In this example, though, there is more variety in the measures and shapes than in the others. The measure of the large fish was neutralized by giving a greater tone contrast to the smaller ones. These three little fishes probably exert as strong an attractive force in the design as the two large fishes. These are all points that arise in a solution of the problem demanding an application of sensitive feeling and good judgment.

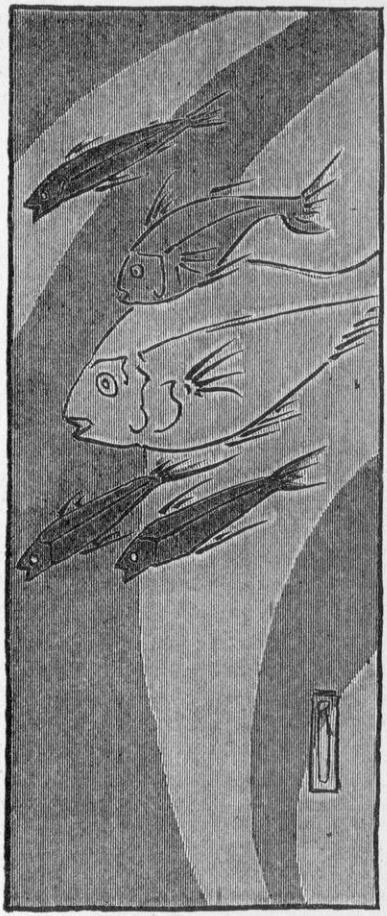


PLATE SIXTY-FOUR

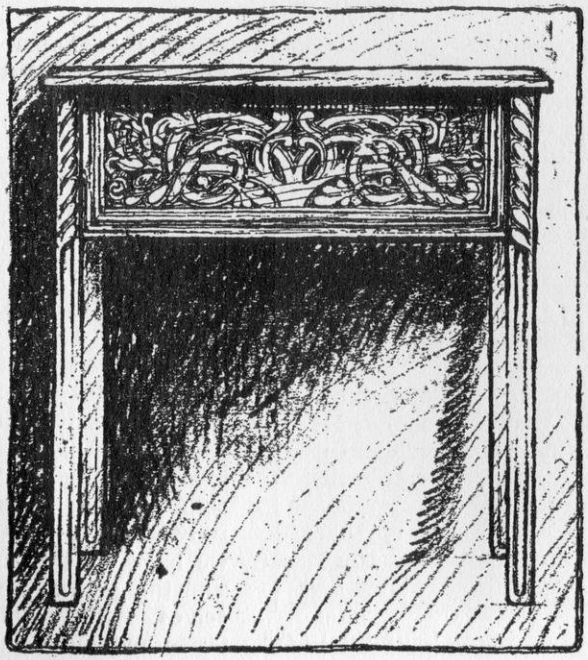
In rendering, the tones should be flat and clear in statement. Lay a wash of the lightest value first over the entire figure. Then, keeping in mind the parts that are to remain in this value, lay the next wash over everything else.

If we seek examples of such work as this, decorative rather than pictorial, for purpose of study, it would be well to turn again to the Japanese workers. It is impossible for man to understand all that a work of art has to say until he has tried to speak for himself in similar terms. There are things in a painting that none but a painter can understand; there is a message in a carving that none but a carver can read. There is a character that arises from treatment in any good design that we cannot fully appreciate until we have tried to say something for ourselves with similar terms and under similar conditions. One learns the secret in doing the work.

THE ART OF WOOD CARVING: A PRACTICAL LESSON FOR THE BEGINNER (ILLUSTRATED BY AUTHOR), BY KARL VON RYDINGSVÄRD

THOSE who wish to acquire only a smattering of knowledge of the various crafts will probably not be greatly attracted by the art of wood carving, for there is too much hard work connected with it for it ever to become popular as a fad. But to those who are willing to devote regularly a little time and energy to carving it offers limitless possibilities, and much can be accomplished even by students who have not the opportunity to gain technical instruction. Indeed, better work can be done by giving even an hour's time at home every day than by studying spasmodically with a teacher and doing nothing between times. The knowledge of the handling of tools and of the grain of woods can be acquired only by actual experience, although of course it is a great help to the student to be able to watch the methods of a skilful worker.

An elaborate outfit for carving is entirely unnecessary. A bench which will answer every purpose can be nailed together by any one who is able to handle a saw and hammer. But it must be made of heavy wood, and the top should be at least an inch and a half thick, and should project beyond the frame five inches in front, to allow space for attaching clamps. It must be rigid enough so that there will be no jarring when heavy work is going on. A top forty inches long and twenty-seven inches wide will be large enough even for big pieces, and a height of forty-one inches from the floor will suit the average person. Twelve tools are sufficient for simple work, and a good selection is as follows, the number indicating the shape of the tool and the fraction its size: (See tool chart, page 441.)

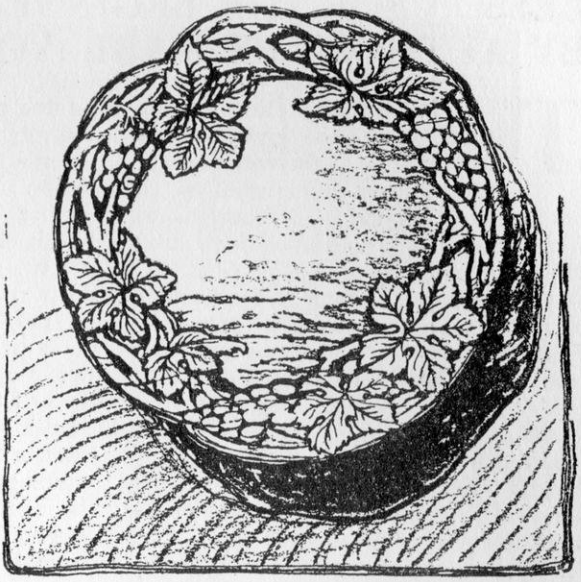


"THE DESIGN FROM THE START SHOULD BE APPLIED TO SOMETHING USEFUL."

Number one, half inch; number three, one-eighth, three-eighths and five-eighths; number five, one-quarter and one-half; number six, five-eighths; number seven, three-eighths; number nine, one-quarter; number eleven, three-thirty-seconds and three-sixteenths; and number forty-five, three-eighths.

The grinding of these tools should be done by some one who has a prac-

tical knowledge of wood carving. The tools which are offered for sale sharpened have a long bevel on the outside and some of the shapes ground are at an angle so that the points project. No professional wood carver would think of using such tools. The proper tools should first be ground on the outside until the edge is left the thickness of a visiting card. The remainder is removed from the inside, leaving a slight bevel there as well, which is absolutely necessary in order to do good work. The cutting edge is then put on, with small stones. The outfit should include one combination stone, soft on one side and hard on the other, and three slip stones of medium fineness and varying thickness to fit the insides of the different tools.



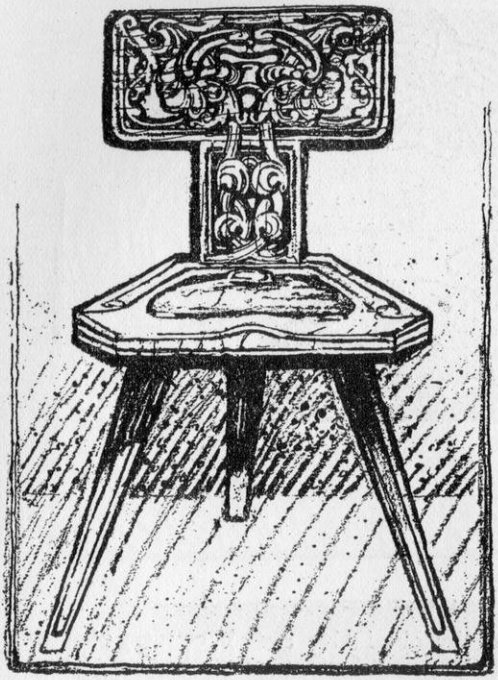
A TRAY DESIGN WITH BOLD SIMPLE LINES.

For very fine tools it is sometimes necessary to reduce the edge of the slip stone by rubbing it on a piece of sandpaper. For the final touching up, there must be a leather strop which has been smeared with mutton tallow and sprinkled with emery dust. Two six-inch carriage clamps and a three-inch dogwood mallet complete the outfit. Other tools will be needed from time to time, but these can be added as the work requires them.

Any straight-grained wood can be carved, but there is a great difference in the cutting qualities of the different varieties. One would naturally suppose that white pine, being very soft, would be the best wood for a beginner, but such is not the case for the reason that it splits so easily and is so hard to cut clean, requiring very sharp tools. Oak and mahogany are the woods most in use here for wood carving, and are easily obtainable even in country places.

We now come to the selection of the object to be decorated and the design for its ornamentation. There is no necessity for wasting time and energy in carving small pieces of wood merely for the practice afforded. The work will be more interesting if it is applied to some simple and useful object, and it will have value enough when finished to compensate for the time and labor expended.

In choosing the object, let it be something large enough to hold a design with bold simple lines, which present fewer difficulties to a beginner than one with many small details, which will split off so readily as to discourage the worker at the outset. A panel of soft quartered oak, which can be used for a box cover, cabinet door or something of that kind, is a good thing to begin upon. The selection of the design is a very important element in the success of the finished product. The amateur must

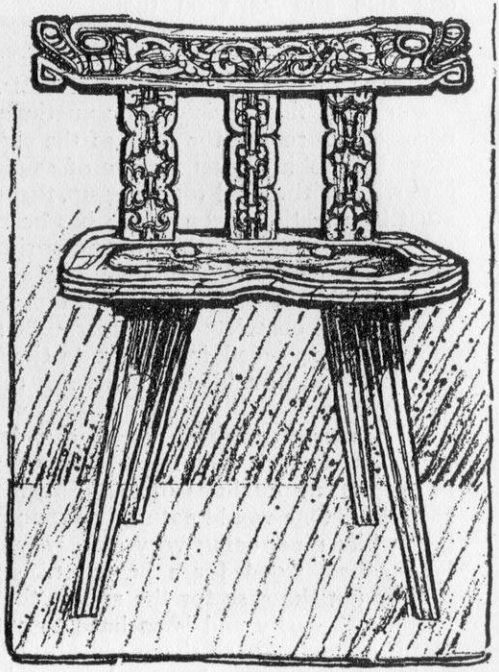


curb all ambition to produce designs such as cupids, birds, flowers, etc., where great technique is required for successful results, but any number of admirable designs for beginners can be procured from the old wood carvings in museums, which are so frequently reproduced in the various art magazines, and which can be readily adapted to any object. Indeed, much of the charm of some of this old work lies in its crudeness, and this quality brings it wholly within the power of the beginner to reproduce it. In fact, a collector of antiques not long ago was looking about to find an amateur who would reproduce for him the missing parts of an old piece, knowing that a professional could not give the naïve treatment required.

In choosing the design for the first work, let it be in low relief. The Celtic strap work or the Norse dragon style are very suitable, or in fact any well-balanced simple ornament without much modeling. It is best to make the drawing in full size on paper and then transfer it to the wood by means of carbon paper.

The wood is then clamped to the bench and with the largest number, eleven, called a veining tool, a rather deep groove is made around the design on the background close to the lines. This is to remove sufficient wood so that the lateral pressure from the thickness of the tool will not split off pieces of the ornament when cutting the outlines, which is the next step in the work.

For this, select the tools which best fit the contours of the design, hold them perpendicularly and use the mallet to drive them to the required depth. A



TWO NORWEGIAN CHAIRS, DESIGNED AND CARVED BY K. VON RYDINGSVÄRD.

TWO DESKS DESIGNED AND CARVED IN NORWEGIAN STYLE BY KARL VON RYDINGSVÄRD.

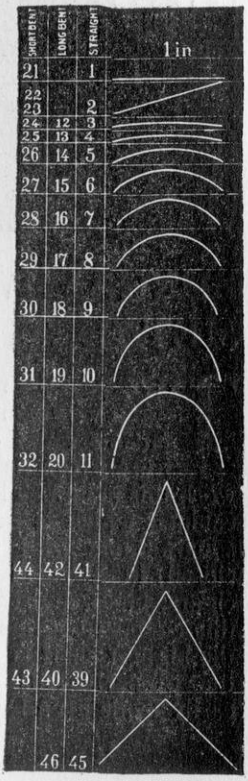
MR. KARL VON RYDINGSVÄRD AND PUPILS
WORKING IN HIS NEW YORK STUDIO.

little experience will determine the amount of force required. If this part of the work is done evenly and carefully, the cuts meeting in all of the corners, the background can be very easily removed. It must be of uniform depth and clean cut, but need not be perfectly smooth, as this suggests machine work too much, so that it is better to let the tool marks show. When this is done, the ornament is left standing in relief, ready for whatever interlacing or modeling the style calls for.

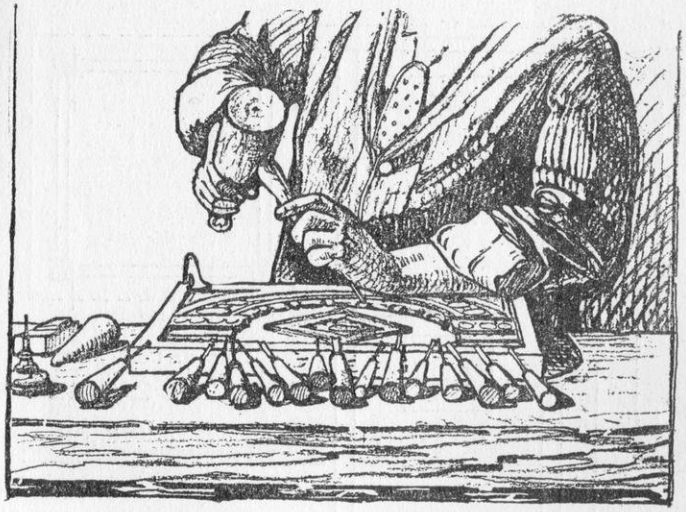
If the design chosen is sufficiently simple, this part of the work should present no difficulty, especially if one has a photograph to work from, and these can be purchased very readily now.

The construction of all carved objects should be as simple and strong as possible. Omit elaborate mouldings and let wooden pegs and tenons take the place of screws and nails as far as possible.

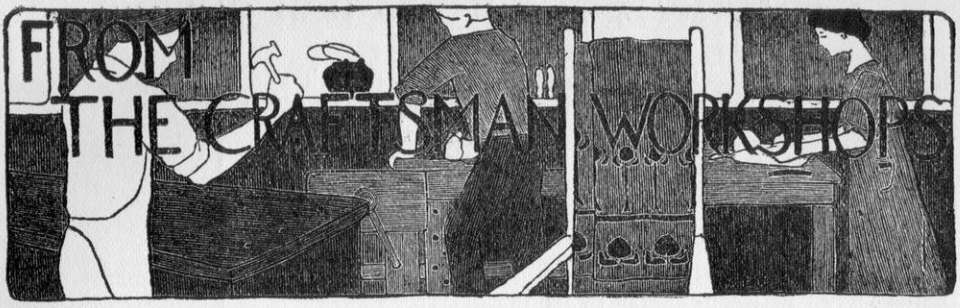
There are various ways of finishing the wood. Oak is usually stained, and there are many good preparations on the market which are easily applied and can be obtained in any shade desired. With most of these a final coating of wax polish is used, which gives a pleasing soft gloss. Under no circumstances should varnish be used on wood carving, as the reflected lights detract very much from the beauty of the work. For the sake of convenience, the manufacturer's tool chart is given, showing the varying sections of the tools with their numbers in three different columns, "short bend," "long bend" and "straight." The amateur will find the "straight" tools sufficient for ordinary work. Most of these can be secured in sizes beginning at 1/32 and all of them at 1/16 part of an inch, up to about one inch in width.



TOOL CHART.



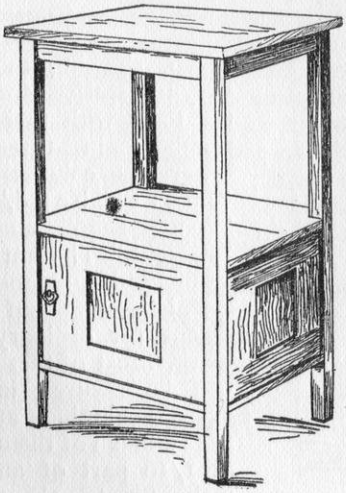
CORRECT POSITION FOR HANDS AND NECESSARY TOOLS FOR CARVING.

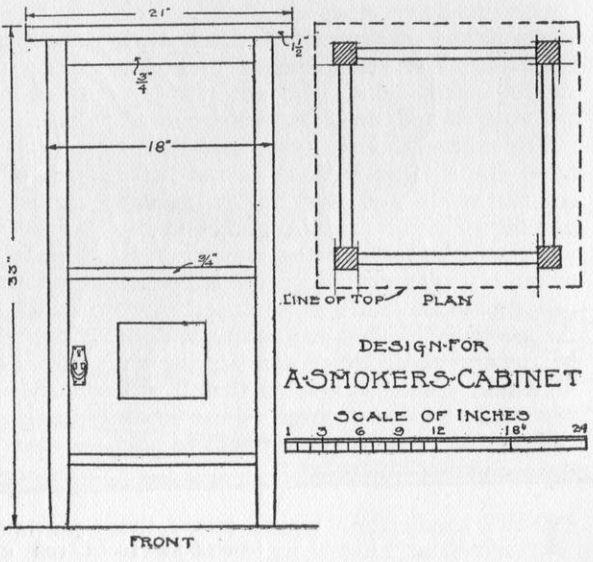


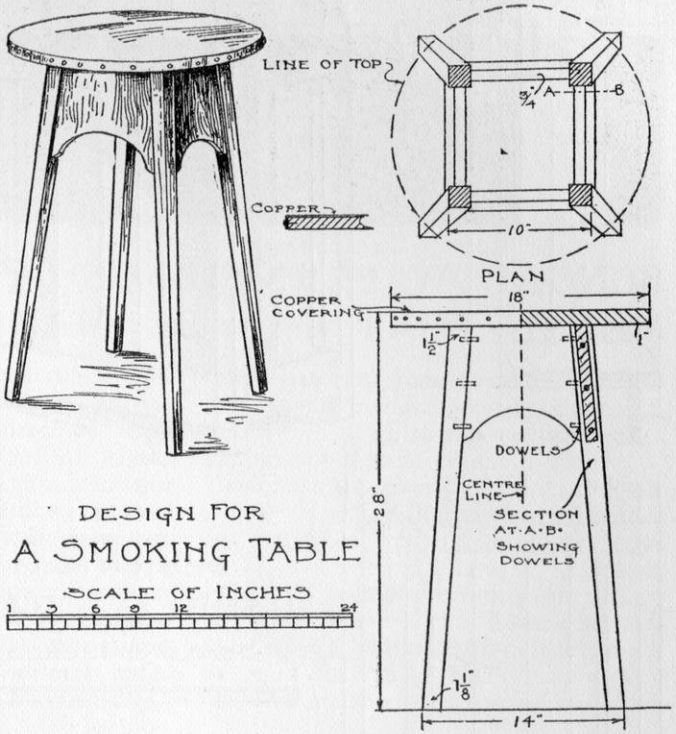
BUNGALOW FURNISHINGS OF WOOD AND METAL THAT CAN BE MADE AT HOME

TWO pieces, simple of construction and very convenient for use in a man's room or in a club room, are given as models for cabinet work this month. The first is a smoker's cabinet, which is nothing more than a square table with the lower part inclosed in a small cupboard to hold cigars, pipes, and the like. The top of this cupboard forms a center shelf, and the highest shelf is formed by the table top proper. This piece can be very easily made even by a worker who has not had much experience. The chief care is to make the construction strong and the finish as nearly perfect as it can be. All the parts should be doweled together with strong wooden dowels to prevent racking apart. If oak is used, the piece should first be subjected to strong ammonia fumes to deepen and mellow the color effect, and then given a light tone of whatever color is desired and a soft dull finish such as we have often described in detail.

The second piece is a smoker's table



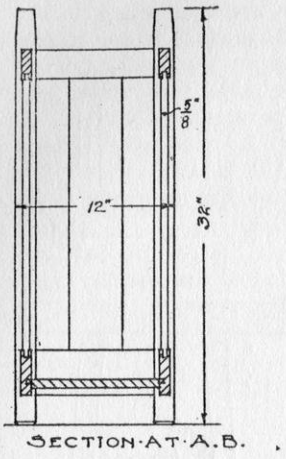


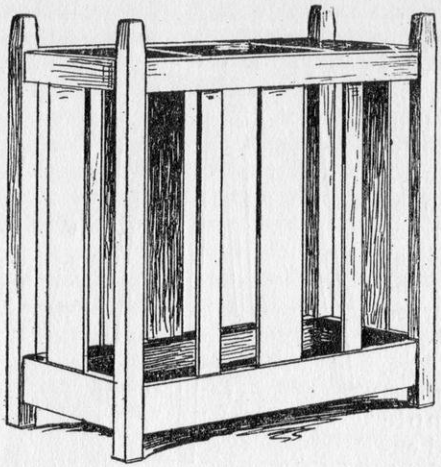


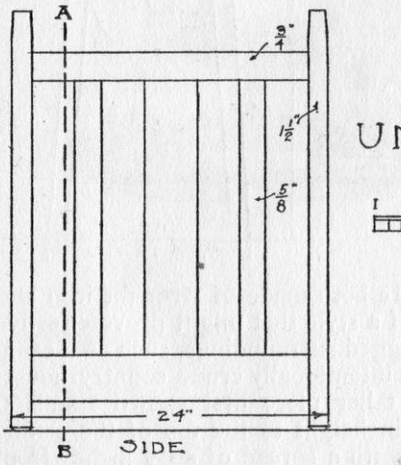
which differs from other tables in having the top covered with a smooth sheet of copper, which is bent down to fit over the edge and fastened with ornamental nails. The construction of the table is as simple as that of the cabinet, the curved side pieces being doweled to the legs. It is one of those exceedingly simple pieces that depend entirely upon the finish of the wood, the workmanship and the nicety of proportion for such beauty as it may possess. An admirable color effect could be obtained by making the table of oak finished in a rich nut-brown, as the copper mellows with age into a dull warm brown that tones beautifully with the oak. The rest depends upon the subtlety with which the straight legs are tapered and the side pieces curved.

The umbrella rack shown here is best fitted for a large hall, as it has three compartments and will hold a goodly number of umbrellas. A glance at the working plan shows the construction, which is simple to a degree. A copper pan should be made to fit exactly into the lower part. This may easily be done by turning the edge of the pan over a wire and flaring it out so that it will rest upon the inside edge of the lower rails and have sufficient strength to hold the weight of umbrellas.

THE candelabra which serve this month as models for metal-workers are both made of wrought iron and are of a style that might prove effective in rugged surroundings, such as a camp or an intentionally crude country house. The taller piece first shown stands 6 feet in height to the top of the candle cup, with a spread of 40½ inches from candle to candle. The standard has first to be considered in the construction, and to make this a 1½ inch triangular iron bar is cut to measure 5 feet 2½ inches long. Both ends should be "butted," if a forge is convenient; if not, they should be squared neatly with a file and emery cloth. The feet are made of strap iron measuring 1½ inches wide by ½ inch thick, bent according to the design. It will be noticed in the illustration that the feet are widened at the curve. This must be done while the iron is hot. Heat the







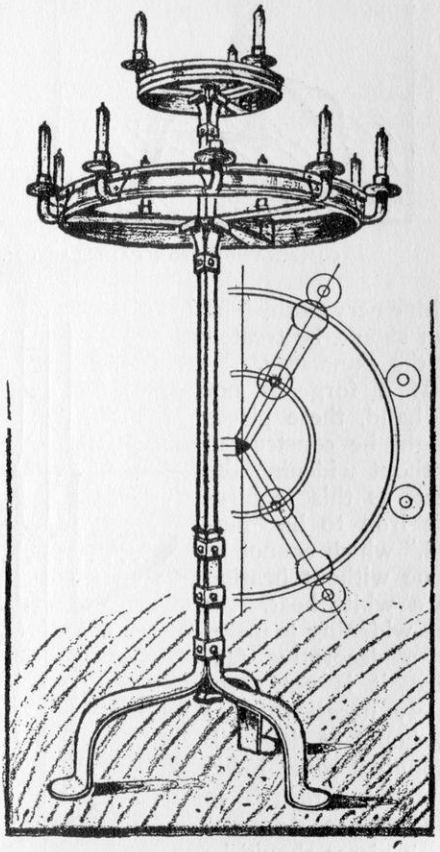
DESIGN FOR
UMBRELLA RACK

SCALE OF INCHES
1 3 6 9 12 18 24

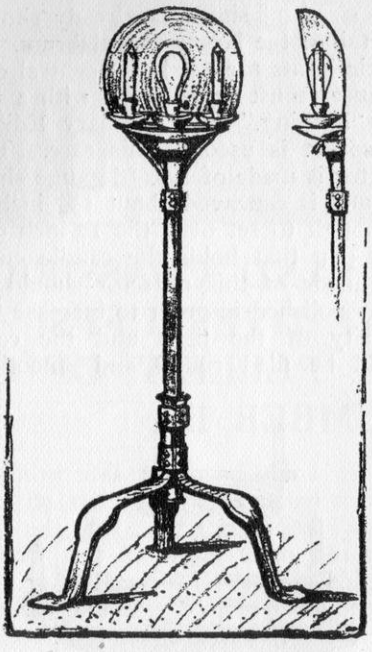
iron to a white heat where the extra width is desired, and, holding one end tightly, hammer the other end until the iron is "butted" to about twice its own thickness. This is then hammered out flat, giving the feet a broader effect at the curve without weakening or reducing the thickness of the iron in any way. Three bands 1¾ inches wide by ⅛ inch thick are hammered around the upper extension of the feet and riveted to the center standard. Next a large band is cut, measuring 36 inches in diameter by 3 inches wide when completed. The band should be turned over a wire at each edge to reinforce it sufficiently to support the candle brackets that are to be riveted to it. The brackets are made of 1-inch iron tubing,—about No. 18 gauge, — left round at the upper part and extending 2⅜ inches below the bottom of the saucer, where it is flattened down in oval shape and bent at right angles to the band. Then the tube is hammered flat, extended up the face of the band and securely riveted there. The saucer is fastened to the tube by cutting a hole in the bottom and hammering down the flange, which is then riveted to the outside of the tube. The support for the band is made in three pieces, brought together in the center. The outer ends are bent up and riveted to the inner edge of the band, and the inner ends are bent down and riveted to the center standard. Three scrolls are made and fastened to the center support directly underneath the band supports, where

they are riveted to the standard with a band. The standard extends about 14 inches above the large band, and at the top is fastened the smaller band, which measures 15 inches in diameter. This second band is made in precisely the same manner as the large one, the edges being turned over a wire. The candle brackets are made of the same size tubing bent in the same way, the only difference being that the upper ones are shorter. The candle saucers are allowed to rest on top of the small band, and the three-pronged support in this band is made just like the lower one. The detail drawing gives the full construction of the candle brackets on the large band, and also a section of the band. Square rivets should be used in the band only, all the other parts of the constructing demanding round-headed rivets.

The second candelabrum shows a combination of candle and electric lights, one electric light in the center and two candle lights on each side. This piece stands 4 feet 6 inches high, and is constructed of iron, with an iron reflector in the back. The electric wire might be attached through the center tube, coming out through the bottom, where it could be connected with a floor plug. In case the house is not wired for electric light, three candles may be used. To make this piece, select for the standard a 1¼-inch round iron tube about No. 12 gauge. This should be flared at both ends; at the bottom to allow the electric wire to slip freely without causing any damage to the wire, and at the top to fit the shoulder or the pan that contains the three candle cups and saucers. The construction of the feet is similar to that already described. The pan that holds the candle cups is about 12 inches in diameter, concaved about ¾ of an inch. This is set on top of the tube that is flared to fit neatly to the pan, and securely riveted. Two candle cups are then made in the same size and shape as already shown in detail of the larger candelabrum. If electric lights are used, the central cup or saucer must be attached with a ⅜-inch "bushing." An ordinary Edison key socket is used in this case. The reflector is made of No. 18 gauge sheet iron and is concaved about 1½ inches, or enough to set over the 12-inch circular pan that holds the candle cups. The inside of this reflector should be highly polished in order to increase the intensity of the light and the edge should be filed round and smoothed



WROUGHT-IRON CANDELABRUM.

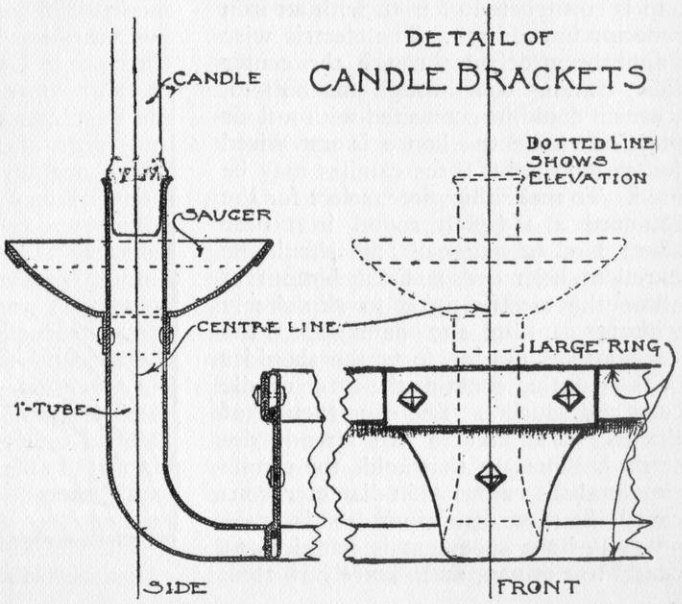


COMBINATION IRON CANDELABRUM.

with emery cloth. The pan should be treated in the same way.

If a forge is not at hand, these pieces might be constructed without widening the feet, as this requires the iron to be "butted," which cannot be done without heating to a white heat. As the widening is merely a decorative feature, it is not absolutely necessary that it should be done, although it gives interest and strength to the whole design. Both pieces should be finished by rubbing the surface down well with emery cloth. Norway iron is usually used for pieces of this kind and should be without rust or particles of scale. If there should be any scale, it can be removed by tapping with a hammer and then rubbing down well with emery cloth.

After finishing the construction, the whole piece should be smoked over a forge or fireplace. Soft coal is best for this purpose, as the smoke from soft coal settles quicker and adheres more firmly than that from hard coal. After the piece has been smoked and cooled, it is rubbed down with emery dust and oil, a treatment which polishes the high places of the surface and leaves the low places dark. Oil should always be used instead of water, as the latter will cause the iron to rust, while oil preserves the finish. This method gives to iron the famous "armor bright" finish, which was used centuries ago by the English armorers, and which today gives to the Craftsman work in wrought iron the dull, soft surface and silvery high lights that make it unique.



GENERAL DESCRIPTION AND CLASSIFICATION OF THE ARTIFICIAL DYESTUFFS: BY PROFESSOR CHARLES E. PELLEW, OF COLUMBIA UNIVERSITY: NUMBER II

THE artificial dyestuffs form such a large body of complicated chemical compounds that at first glance it would seem hopeless for any one who is not a trained organic chemist to get any clear or definite ideas about them. This, indeed, would be the case if any attempt were made to study them chemically, *i. e.*, with reference to their composition or their method of manufacture, but when it comes to the application of them to the various textile fabrics and other materials for which dyes are valuable we soon find that the problem is not so very difficult, after all.

To be sure, there are hundreds, if not thousands, of different dyes on the market now, about half of them being known under five or six different trade names, according to the particular manufacturer. But fortunately all can be separated more or less accurately into five or six different classes of dyes, each one of which is used for dyeing particular materials in a particular manner. For instance, if we should come across a dyestuff marked, let us say, "Acid Red, B, Metz," it would not be necessary to hunt up that particular color in the Metz catalogues to know how to use it. It would be pretty safe to assume that it belonged to the class of "Acid Dyes," and hence that, like the many hundred other dyes of that class, it would be useless for cotton or linen, but could dye wool, silk and other animal fibers in a bath containing free acid.

And now about obtaining the colors. Though originally started in England, the dyestuff industry for the last thirty-five years has been centered almost exclusively in Germany. In that country there are now six or seven factories of the first class, with enormous capital, and large and very profitable output. There are several smaller factories in Germany, and both France and Switzerland have two or three houses of considerable size and importance, whose output, however, is not brought to this country as much as the German products. In England and the United States the industry is small and hardly worth our attention. All of the large manufacturers have active and splendidly organized agencies in New York, with branches in the important cities, and are most energetic and broad-minded in pushing the sale of their products, and in introducing novelties.

But here also let me put in a word of

warning. It is out of the question for any dyer, and especially any amateur, to keep in touch with what is being produced by each of the large houses, any one of which may have twenty or thirty new and interesting colors come out in one season. It is generally far more satisfactory to select one or two of the large houses, who cover the particular field, and then deal almost exclusively with them. Above all, the amateur should if possible avoid the retail seller of dyes—of whom there are several—putting up dyestuffs in small packages at very high prices under special fancy names. The dyes, as sold by the manufacturer, cost on an average from 50c. to 75c. a pound; and, while the purchasing of colors at this price and retailing them under assumed names for 10, 20 or even 25c. an ounce may be good business, it is more profitable to the dealer than to the amateur purchaser.

The chief disadvantage in the procedure, after all, is not the extra expense,—though, to be sure, that is an item,—but the ignorance of the true name of the dyestuff and hence the impossibility of knowing how it should be applied and what the results will be. Any one who knows anything of the subject could tell just how and what to dye with, for instance, Methyl Violet R, from any one of a dozen manufacturers. But it would be a pretty difficult matter to know just what would result from a little package of, say, "Empire State Brilliant Violet," sold, at ten times its value, over the counter of some country drug store or grocery shop.

In these articles, after discussing each class of dyestuffs and explaining their application and general properties, lists will be given of three or four selected colors from the New York agents of five of the largest and most reliable German manufacturers. Workers wishing to obtain these dyes may do so by writing to THE CRAFTSMAN for the name and address of the agent handling the kind of dye that is required. It would be best in such cases to give a brief description of the kind of dyeing they wish to undertake and the effects they wish to produce. These agencies are willing to sell their dyestuffs as called for, in packages of one pound and upwards, and if sufficient demand shall arise, they will undoubtedly make arrangements, either through their own office or through some separate retail agents, to supply still smaller quantities, properly labeled, at prices not unreasonably high.

By the way, it is important to remember that to identify a color it is necessary to know these three points: First, the trade name; secondly, the shade or distinguishing letter; and, third, the manufacturer. The trade name may have some reference to the class, properties and color of the dye, as, for instance, Fast Acid Blue; or to its composition, as Methylene Blue or Thiogene Brown. But in most cases it is an arbitrary name, given by the original manufacturer when the patents were issued, or assigned later by the local agents.

The letter or letters following the name refer generally to the shade, as, for instance, B for blue, R for red, G for yellow (German, *gelb*), and so on. Thus Methyl Violet is sold in brands running all the way from 6B to 6R,—that is, from full purple shades very close to blue, to bright violet shades very close to red. Sometimes the letter refers to the composition or class, as Fuchsine S (German, *sauer*), generally known as Acid Fuchsine, or Alizarine Blue, D, where the D indicates a direct cotton color. But usually it is a mark applied for purposes of identification, whose significance cannot easily be learned by those not in the business.

Finally comes the name of the manufacturer or agent, which is absolutely necessary, in very many cases, in order to distinguish one dye from another of the same name. The best of the older dyes, whose patents have expired, are manufactured, more or less of the same strength and shade, by all the large firms, although not always under the same names. But the later colors are, of course, the individual property of the different manufacturers, and the name alone gives, often, but little clue to the color, unless the name or initials of the maker accompany it.

But with these three essentials correctly given, name, brand and maker, a color can be identified and obtained true in composition and shade, even after the lapse of many years.

CLASSIFICATION OF THE COAL TAR COLORS

I. *Direct Cotton Colors*—
(salt colors).
II. *Colors Formed by Oxidation.*
(a) Sulphur dyes.
(b) Vat dyes, Indigo, etc.
III. *Basic Dyes.*
IV. *Acid Dyes.*
(a) Without after treatment.
(b) Developed by metallic salts.
V. *Mordant Dyes.*
(a) Alizarine and its allies.
(b) Chrome dyes.
VI. *Spirit Soluble Colors.*

CLASS I. DIRECT COTTON DYES.

These dyes, discovered comparatively recently, have the property of dyeing cotton, linen, paper, and other vegetable fabrics directly, that is, without the assistance of any intermediary, such as tannic acid, alum, or similar chemicals, known as mordants, and used to make the dye adhere to the fabric.

Before these colors were discovered it was a matter of some difficulty to fasten the dye to the material. Vegetable fibers consist almost entirely of the very inert substance, cellulose, which has little or no affinity for the earlier known dyestuffs, of the basic and acid classes. These colors will dye animal fabrics, wool, silk, feathers, leather, etc., with great ease, and adhere firmly to them, but when they are boiled up with cotton or linen, under the same conditions, the dye will wash right out, unless the fibers have previously been impregnated with some mordant or fixing agent.

Since the accidental discovery, in 1885, of the peculiar affinity for cotton and other vegetable fibers of the brilliant but fugitive dyestuff, Congo Red, a vast number of colors have been introduced and have entirely revolutionized the dyeing of cotton.

Class names—The principal groups of dyestuffs belonging to this class are named as follows: Benzidine, Benzo, Chicago, Congo, Diamine, Dianil, Naphthamine, Oxamine, and Mikado.

General Applications. These colors are principally used for dyeing cotton, linen, and paper. They take particularly well on mercerized cotton, and also on artificial silk, care being taken, with the last-named material, not to heat the bath more than lukewarm. As is the case with practically every dye, they will take very readily in both wool and silk, and, indeed, often give faster and better colors on those than on cotton.

An interesting use of these dyes is the dyeing of mixed goods, *i. e.*, cotton and wool, or cotton and silk. These can be dyed evenly by these direct dyes, by dyeing in a cold or lukewarm bath, first, when the cotton will take, and then, on warming the bath, the wool or silk will take the color and come up to shade.

DYEING DIRECTIONS

For Cotton.—The color is dissolved in warm water and added to the dyebath, which should have a moderate amount, four or five per cent. (of the weight of the goods), of soap dissolved

in it, and also be made slightly alkaline with soda ash. The cotton, thoroughly wetted, is then immersed, and gradually warmed, and then a considerable quantity of salt—or, better, of Glauber salt—added, and the bath brought up to a boil, and kept boiling for half to three-quarters of an hour. The goods are then taken out, rinsed slightly in water, and then dried. The reason usually given for adding salt or Glauber salt to the dyebath is that its presence makes the dyestuff less soluble in the liquid, and hence more ready to deposit on and adhere to the fiber. On account of this practice these Direct Cotton Dyestuffs are often called the "Salt Colors."

For Mercerized Cotton.—This has such a strong affinity for the color that the amount of dyestuff and of salt may be much diminished, and the bath not heated hotter than 140° or 150° F. It is well, also, to add a litle Turkey Red oil to the bath before immersing the goods.

For Linen.—Linen is dyed the same as cotton, excepting that the amount of salt is diminished, and some Turkey Red oil is added, to make the color go on more slowly, and so penetrate the fiber better.

For Wool and Silk.—These dyes are not used on animal fibers as much as the Acid Dyes. They will, however, dye wool in a hot bath containing a considerable amount of salt or Glauber salt, and slightly acidified with acetic acid. After dyeing, the silk is rinsed in water slightly acidulated with acetic acid.

Colors Produced.—These direct cotton, or salt dyes, give as a rule very bright, clear, pretty shades. They are easy of application and dye evenly.

On cotton the colors are not, as a rule, fast to light, and are apt to bleed when boiled with white goods. On wool and silk the colors, while not, in most cases, fast to light, are very fast to washing.

Selected Colors.—The dyes mentioned in the following table are all decidedly fast to light, far more so than most of the class:

Badische—Oxamine Blue B; Cotton Yellow G; Oxamine Fast Red F.

Cassella—Diamine Fast Blue FFG; Diamine Fast Yellow FF; Diamine Fast Red F; Diamine Fast Brown R; Diamine Fast Grey G.

Elberfeld—Brilliant Azurine 5G; Chrysophenine G; Benzo Fast Scarlet 4BS.

Kalle—Direct Blue B conc (concentrated); Naphthamine Yellow NN conc; Naphthamine Fast Red H; Naphthamine Brown HR.

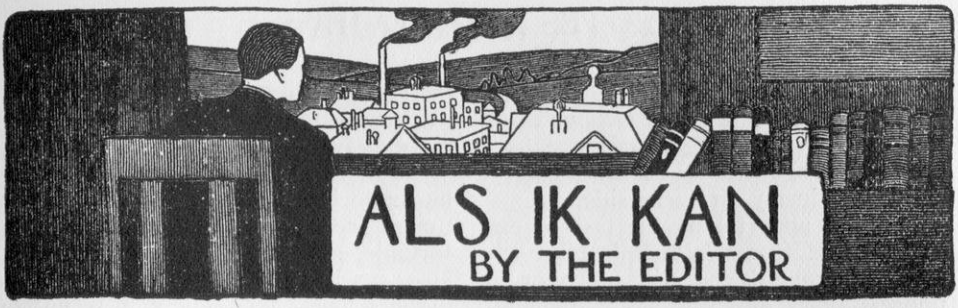
Metz—Direct Blue 108; Oxydianil Yellow O; Direct Scarlet B.

After Treatment.—To increase the fastness to washing and, to some extent, to light, of these dyes, it is customary to after-treat them, especially when dyed on cotton. By the process known as "Diazotizing and Developing" these can be made *exceedingly* fast. The method, however, is hardly available for any one not a skilled dyer.

It is also possible, by "topping" fabrics dyed with these colors with Basic dyes, to get shades quite fast to washing. Only a few, however, of the Basic colors, like "Methylene Blue" or "Methylene Violet," are any faster to light than the common run of the direct cotton colors themselves.

The simplest method of after-treating is to boil the dyed goods for fifteen or twenty minutes in a bath containing a little copper sulphate, 1½ or 2 per cent., and sometimes the same amount of bichromate of potash, acidified with a little acetic acid. This, in general, fixes the color so that it will not wash out nor bleed, and makes it faster to light at the same time.

This after-treatment is not necessary for wool and silk dyed with the selected colors, but, in special cases, will be found valuable for cotton.



PERMANENT WELFARE OF THE FARMER

IT has long been patent to political economists and students of public affairs that a serious menace to our continued prosperity lies in the decadent tendency of agriculture in this country and the persistent efflux of population from our farming districts. Whilst the few have realized this peril, the masses of our people have rested in complacent satisfaction under the delusion that our manufacturing development is quite adequate to the assurance of our permanent welfare. A greater fallacy than this is hardly conceivable. Agriculture is the foundation of our economic structure. It is the fountain of our mechanical industries and the mainstay of our useful arts. Let our husbandry decline and we must inevitably retrograde as a nation.

The general condition of farming in our country has reached an alarming pass. In the east a large part of the land has been rendered worthless or capable of yielding only the smallest returns to the cultivator. The ruinous methods by which this deterioration has been brought about are spreading westward. Concurrent with the impoverishment of the soil, and largely owing to it, there has been, during the present generation, a steady movement away from the soil.

The President, with characteristic directness, has decided to institute measures for the relief of the situation and the promotion of a development in a desirable direction. He is about to appoint an agricultural commission to make a close inquiry into the social economy of our agricultural communities and the conditions relating to our agencies for industrial training. These will be the main fields of the commission's investigation. It will not concern itself—except, perhaps, incidentally—with questions of technical agriculture.

The commission is expected to turn its attention particularly to industrial training, and especially such training as fits a man for the farm and the shop. It will critically inspect such institutions as profess to fill this, or similar, purpose. It is well known that a large proportion of our industrial schools are faulty in their methods and ineffective in their results. It will be the object of the commission to give a new direction and a new impulse to such of these as are not adequately filling the rôles they have assumed. In this pursuit it is hardly possible that the commission can fail to conceive of improved means for achieving the desired end.

It is believed that the commission can, and hoped that it will, devise measures for fostering and improving the social institutions of the farming population. The President is desirous that these institutions should be increased by various new organizations. He considers it of the utmost consequence that our farmers should form societies for

the express purpose of guarding their interests against the encroachments of the several highly organized predatory commercial agencies that touch the agricultural industry on every side.

Without undertaking the task of expanding the farmer's technical knowledge, the commission will endeavor to impress upon him that good management is the first essential to success, and that its lack cannot be compensated for by any degree of scientific attainment. Attention will be paid to means of economizing material and labor, systems of cost keeping, methods of marketing and transporting produce.

The President is insistent upon the point of increasing the farmer's income by other means than the reckless exploitation of the land. We believe that two ready mediums exist for the attainment of this object, namely: the cessation of the haphazard practices that prevail among our landowners, and the alliance of practical handicraft with husbandry. As to the former, only the business man who has made a study of conditions in the farming districts of our Eastern States can realize the great loss that is entailed by the lack of system and provident management on the part of the farmer. Although he is generally a shrewd seller, he buys injudiciously. He can seldom give a detailed account of a year's expenditures or analyze the profits of a harvest. It is anticipated that the work of the commission will lead to an intelligent campaign of education in these, among other, desirable directions.

The prospective commission will carefully consider plans for the extension of the rural settlement. This, one of the most promising factors in the future growth and elevation of the agricultural population of the west, is an essential feature of all the Reclamation Service projects. In it, probably, will be found a great measure of the answer to the following questions which the President will require the commission to solve as fully as possible:

"How can the life of the farm family be made less solitary, fuller of opportunity, freer from drudgery, more comfortable, happier, and more attractive? How can life on the farm be kept on the highest level, and, where it is not on that level, be so improved, dignified, and brightened as to awaken and keep alive the pride and loyalty of the farmer's boys and girls, of the farmer's wife, and of the farmer himself? How can a compelling desire to live on the farm be aroused in the children that are born on the farm?"

There is every reason to believe that the agricultural commission will accomplish highly important practical results, but if it should do no more than awaken public attention to the vital questions affecting our agricultural interests, its appointment will have been amply justified.

NOTES

"AN Exhibition of Work by Former Pupils of the Art Students' League" was the notice sent out by the National Arts Club for the last exhibit of the spring, and a visit to the Galleries brought out the interesting fact that some of the names we are most familiar with at the National Academy, at Pennsylvania, at Pittsburg are numbered among the League alumni: Irving Wiles, F. Luis Mora, C. Y. Turner, Robert Reid, Louis Loeb, Bruce Crane, Charles Curran, Louise Heustis, George H. Macrum were perhaps the most noticeable. And beside the paintings of importance there were portrait busts, bas-reliefs, a small group of bronzes, a case of miniatures, and some excellent original drawings for illustrations.

The most notable work, as is usually

the case in an American exhibit, was the portraits. Irving Wiles exhibited a brilliantly painted figure, the "Girl in Black," and this done with such superb technique and vivid handling of color that one hesitates to criticise, and yet it is difficult with all the good painting to enjoy this portrait because of the artificial mannerisms which are in every detail of the pose and expression. It is all self-consciousness and egotism. Of course, Mr. Wiles might say "it was there,"—to which there is really no answer, except that it seems a pity that a few more really beautiful picturesque charming women cannot afford to have their portraits painted and that so much excellent work in portrait painting is handicapped, from the lay point of view, by the kind of subject. And the better the painting the more one resents the subject; that is, the more the ordinary mind, not looking for good work only, resents it.

Robert Reid calls his portrait (supposedly another picture of his lovely young wife) "A Gold Screen," a name derived from the gorgeous background of gold and blue. But the gold is everywhere in the picture, in the hair of the beautiful woman, in her flesh tints, in the draperies, as well as in the splendid old screen. The blue is repeated in the girl's eyes and in the shadows of her gown. It is a most interesting example of this artist's color feeling, which is not inevitably beautiful, as one feels in a second picture of his, hung in a separate panel in the exhibit, "Spirit of the Flame," which seems obvious and scratchy.

In distinct contrast to the rather emotional treatment of color which one feels in the "Gold Screen" is Luis Mora's "Portrait Study," all rich browns and soft shadows, except the delicately painted face and hands and one splash of deep red in the dark fur hat. I don't know that I have ever heard any one specially speak of the way Mr. Mora paints hands, but it is done with such wonderful feeling for the character that is inevitably in a hand and with such subtle beauty of expression that the writer recalls without effort the hands of most of the portraits of Mr. Mora's recently exhibited. The "Portrait Study" is a mellow canvas, rich yet somber, as the petals of the autumn dahlia might have these two qualities at once. It is hard to say whether a certain fine tender appeal in the painting is the quality of the girl herself or Mr. Mora's method of treating delightful lines and interesting expression. But there is not the faintest seeking after the picturesque in the pose or presentation, not the least effort of the artist to discover temperament in the sitter or impinge his own as a substitute. It is just the sort of good painting that sees beauty in line and color and knows how to handle it honestly and sympathetically.

Louise Heustis has contributed a most striking study called "Mother and Son." It is a portrait of Mrs. Albert White Vorse and her little boy, done in a most unusual color scheme, a certain somber reddish gray pervading not only the background but the draperies and even the flesh tints of the woman. The tender brooding expression of the mother's face as it rests against the little boy's head is exquisite. The child is done in higher tones, the dress almost white and the face full of light, revealing a certain subtle radiance which is characteristic of an essentially spirituelle temperament. The charm of the work lies in this contrast of the child's face and the shadow-gray tones.

C. Y. Turner showed a portrait of Walter Shirlaw, almost a monochrome, full of individuality and whimsical charm. Hung next to this characteristic portrait was a funny chubby baby with stubbed out toes and cunning wabbly legs and a certain sturdy little inde-

pendence, one of Louise Cox's delightfully painted children.

The most interesting bronze in the exhibit was "The Dancer," by Abastenia Eberle, reproduced in THE CRAFTSMAN for June. And the most significant bit of modeling was Roland Hinton Perry's portrait bust of his beautiful daughter Gwendolyn. Among the illustrators who exhibited were J. Hambridge, Thomas Fogarty and Edward Penfield.

A late exhibition at the Montross Gallery presents a group of men who all rank as significant American artists, though a group of widely diversified expression and at least of two generations. First of all there is an Inness (one looks at the work of Inness the elder these days with a great deal of curiosity and interest). This is a very red sunset, a not wholly satisfying picture. It seems a little hard and a little unreal, somehow a bit suggestive of aniline dyes, but one knows it is a real Inness or otherwise it would not be in the Montross Gallery, for there are a few picture shops in New York that are a guarantee of their wares. After the Inness (which of course had the first sensational interest) one stopped before "A Study," by John H. Twachtman, an unfinished sketch of a wide garden walk, full of interesting suggestions of color masses and beautiful light. Looking at this sketch Mr. Montross said with much sadness, "It is all wrong about Twachtman; he should be here among us now, doing his best work. We could not spare him, for he was among our greatest."

There were two pictures of Childe Hassam's, "A (very) Wet Day" and "A June Morning," the latter a green canvas full of glittering sunlight effects. D. W. Tryon showed "Harbor Lights" and "An Autumn Study,"—both canvases of fine craftmanship. In the place of honor was Horatio Walker, "A Stable Interior — Woman Milking," a masterly Canadian *genre* piece, beautiful in color. T. W. Dewing showed "A Portrait Study"; J. Alden Weir, "An Approaching Storm," the latter not quite convincing enough to give one any sense of uneasiness. Metcalf exhibited "Camden Hill," and Lathrop three paintings, "A Buckwheat Field," "Evening Light," and "A Hillside Pasture," all full of individual charm.

In a smaller "sacred inner room" Mr. Montross showed for our special pleasure two delightful small water colors by J. Francis Murphy, of some twenty years ago. Bits of pasture lots, perhaps, full of poetry and sensitive understanding of Nature's delicate moods.

THE closing, late in May, of the art, industrial and business classes of the Young Women's Christian Association was marked by the exhibiting, in the classrooms, of the most significant work done by students during the year. In this school there are classes in design, water color, wood carving, clay modeling, mechanical, free hand and costume drawing, dressmaking, millinery, feather curling, embroidery, cooking, cooking for the sick, training of attendants on the sick, writing, commercial arithmetic, bookkeeping, business training, stenography, dictation for stenographers, typewriting, English, German, French and choir music. The work shown was notably needlework, block printing and stenciling, wood carving, clay modeling, water colors and drawing in wash and charcoal. The most significant pieces shown, however, were some delicate effects in stenciling on window curtains, several excellent examples of combinations of darning and drawn work, cut work and appliqué and a few sturdy chests and a chair of carved wood.

A very interesting and important exhibition of religious art was held at the New York studio of J. & R. Lamb early in May. Besides the work, the most significant of its kind, of the two brothers, there were religious paintings by well-known contemporaneous artists and photographs of important religious subjects. It is needless to say that the exhibition drew many enthusiastic visitors.

THE first annual exhibition of the Portland (Oregon) Architectural Club, held in the winter, afforded an excellent opportunity for a comparative study of the work of western architects. The Portland Club is strongly advocating the formation of a Pacific Coast Architectural League to hold periodical exhibitions.

A very complete exhibition of the work of Mr. Gari Melchers has been held at the Cottier Gallery, New York. These sumptuous canvases could scarcely be placed in more beautiful and decorative surroundings, with rare antique rugs, genuine old Period furniture, exquisite bronzes, and even, *en route* to the upper gallery, a Rodin or two for one's delectation. Many of the paintings, perhaps all, have been exhibited before, in Philadelphia, Pittsburg and in New York. A number of them are now owned by museums and private collections, so that one may not soon again see brought together such a fine variety of this man's work.

In considering this work, comment is made solely of Mr. Melchers as a great painter, not of his work as an *American* artist or in relation to its significance in helping to develop an essential American art. It is as a painter of people, grave, kind, tender, joyous, tragic, unawakened, indifferent, stolid, of conditions at once vivid and realistic and sympathetic, that in this instance his work is considered. A great painter indeed, who can flood a picture with sunshine or show you the mellow green light in the heart of the woods, who touches your soul with a vision of hungry mother love and equally with a story of the pathos of the passing of love by in poverty and drudgery.

REVIEWS

THE Suffragette movement in England is taken up with much earnestness and a great deal of sympathetic understanding by Elizabeth Robins in a novel called "The Convert." The story itself, as a whole, is strong and well constructed, the only sign of strenuous insistence upon its underlying purpose being the somewhat tiresome repetition of incidents at the turbulent open-air meetings of the Suffragettes. The plot hinges upon the conversion of a woman of the upper caste to the views of the Suffragettes, an incident which has a great many parallels in actual fact. In this instance the woman who is converted was able to realize the nature of the rights her humbler sisters were fighting for because she herself had experienced something of the bitter and tragic side of life. But this is merely an incident in the strong portrayal of the genuine heroism which for the most part underlies the frantic demonstrations of these women. Friends and foes alike of the idea of female suffrage would find much of interest in this book. ("The Convert." By Elizabeth Robins. 304 pages. Price, $1.50. Published by The Macmillan Company, New York.)

THE engravings of Timothy Cole which so marvelously portray the quality of a painting need no introduction to any art lover. His copies of the old Spanish painters have been collected in a book the text of which is a history

of Spanish painting by Charles H. Caffin, with notes on the various painters by Mr. Cole himself. It is a handsome as well as interesting volume. ("Old Spanish Masters." Engraved by Timothy Cole, with historical notes by Charles H. Caffin. Illustrated. 175 pages. Price, $6.00 net; postage, 30c. Published by The Century Co., New York.)

A story of old Revolutionary days that has a good deal of the atmosphere commonly understood to have belonged to the early times of this republic is called "The Van Rensselaers of Old Manhattan." It is put into attractive form and quaintly decorated, and the story itself is a romance involving the adjustment of Tory and Whig alike to the conditions of the new republic and, incidentally, of pride, villainy and, of course, love. There is no very subtle psychology in it, but it would serve excellently to while away an idle hour in a hammock. ("The Van Rensselaers of Old Manhattan." By Weymer Jay Mills. Illustrated and decorated by John Rae. 215 pages. Price, $1.50 net. Published by Frederick A. Stokes & Company, New York.)

ANOTHER book, uniform in style but widely differing in character, is "Under the Southern Cross," by Elizabeth Robins. The story deals with a modern American girl, possessed of all the characteristics of her race and time, who has the good or ill fortune to become the adored one of an impassioned and unconventional Peruvian baron. The scene is laid on shipboard and in Mexico, and the story is not only delightfully told, but works itself out to a conclusion that is at once logical and unconventional. ("Under the Southern Cross." By Elizabeth Robins. Illustrated and decorated by John Rae. 234 pages. Price, $1.50 net. Published by Frederick A. Stokes & Company, New York.)

THE "Universal Dictionary of Artists," by Dr. Ulrich Thieme and Dr. Felix Becker, published in Leipzig, will prove of interest not only to artists but to all interested in art. The work contains concise biographical sketches of artists in both fine and applied arts, including those of all times and countries. The utmost accuracy has been preserved in all details, and those associated in the work include some three hundred authorities from various parts of the world, together with special associate editors to deal with different periods and countries. Accuracy, together with bibliographical information showing further sources for reference appended to each article, make it a valuable reference work for all libraries.

The dictionary is in twenty volumes. The first volume has just been published, and the editors are expecting from this on to bring out two volumes a year. ("Universal Dictionary of Artists." By Dr. Ulrich Thieme and Dr. Felix Becker. Price per volume, $8.00; in half calf, $8.75. Published by Wilhelm Engelmann, Leipzig. Sold by Lemcke & Beuchner, New York.)

PROFESSOR Pearson, of Pennsylvania University, has performed a real service for the cause of the improvement of the public health in translating from the Danish of Professor C. O. Jensen his authoritative work on the hygiene of milk. The book has the advantage of not only being scientifically accurate but it is also simple and entirely practical, so that it forms an excellent working reference book for all those interested in dairying and sanitation. The book gives a very definite notion of what requirements should be made of dairymen for the proper guarding of the milk supply, and in the ap-

pendix are brought together various legal regulations now in use which are extremely suggestive. ("Essentials of Milk Hygiene." By C. O. Jensen, translated by Leonard Pearson. Illustrated. 275 pages. Price, $2.00 net. Published by J. B. Lippincott Company, Philadelphia.)

THE volume called "Poets' Country," edited by Andrew Lang, pictures the surroundings that influenced the characters and work of some of our best loved poets, without attempting the hopeless and unwelcome task of further describing scenes already made famous by their pens. While Glasmere and Alfoxden, Abbotsford, Newstead Abbey, that little stream called the Doon, and the churchyard immortalized by Gray bring up scenes familiar to the imagination of the poetry lover, this book, with the charming paintings of Mr. Francis S. Walker reproduced in color, and the appreciative descriptive writings of the distinguished contributors gives the reader a real sense of friendliness and intimacy with the poets and the places they knew and wrote about. ("Poets' Country." Edited by Andrew Lang. Illustrated by Francis S. Walker. 363 pages. Price, $5.00 net. Published by J. B. Lippincott Company, Philadelphia.)

AN ingenious way of impressing upon the minds and memories of children the beauty and significance of some of the English masterpieces of painting has been discovered by Lady Tennant, who has recently written a charming book entitled "The Children and the Pictures." The children in the case belong to a wealthy English family and live in a beautiful country home where the picture gallery is something to be maintained from generation to generation. It contains a number of examples from Hoppner, Romney, Reynolds, Hogarth, Turner, Gainsborough, Morland and other men of that period, and one of the children, an imaginative little girl, dreams night after night that the people in the pictures come out of their frames and tell her their stories and stories of their times. The result is that the pictured people become living personalities with characters and ways of their own that will be as interesting to children who read the book as they were to the little girl who dreamed it all. ("The Children and the Pictures." By Pamela Tennant. Illustrated. 233 pages. Price, $1.50. Published by The Macmillan Company, New York.)

A biography that gives us a pleasantly intimate view of George Washington is "The Seven Ages of Washington," by Owen Wister. The title comes from the division of Washington's work into seven periods, the first of which deals with his ancestry and the last with his immortality. Between these come the chapters devoted respectively to his childhood, frontier life, Mount Vernon, the Revolution and the Presidency. It is a delightfully human and sympathetic picture of the man who to most people is little more than an heroic abstraction, and is an excellent book to give to young people who are vitally interested in learning all they can of the great men of their country. ("The Seven Ages of Washington." By Owen Wister. Illustrated with photogravures. 253 pages. Price, $2.00. Published by The Macmillan Company, New York.)

THE art collection in the Prado at Madrid furnishes Mr. Charles S. Ricketts with an interesting basis for a discussion of Spanish art. The book is written authoritatively and discriminatingly, and is particularly valuable for its exhaustive discussion of the art of Velasquez. This book completes the

"Art Galleries of Europe" series. ("The Art of the Prado." By Charles S. Ricketts. Illustrated. 398 pages. Price, $2.00 net. Published by L. C. Page & Company, Boston.)

MR. Albert F. Calvert has woven into his book on Spanish armor some of the imaginative charm that centers about the chivalrous days of the Iron Age. Mr. Calvert has based his discussion on the wonderful collection in the Royal Armory, at Madrid. Fully half the book is taken up with photographs of armor, which will be of immense value to any student of costume. ("Spanish Arms and Armour." By Albert F. Calvert. Illustrated. 390 pages. Price, $1.25. Published by John Lane Company, New York.)

A book that will probably be interesting to the student of landscape painting and water color is "The MacWhirter Sketch Book," which gives a number of ideas and suggestions culled from the sketch book of John MacWhirter, R.A. Many of these are in color and others in pencil, and they range from the rough jotting down of the artist's impression of an oak branch to studies for elaborately detailed paintings. ("The MacWhirter Sketch Book." Illustrated. 56 pages. Price, $1.50 net. Published by J. B. Lippincott Company, Philadelphia.)

IN America the gigantic scale on which the Western farms are operated has served to discourage the small producer and blind him to the financial value of the small farm. In "Three Acres and Liberty" Mr. Bolton Hall gives an excellent idea of the possibilities of intensive cultivation, through showing what has already been done. The book is not a text-book, but gives sufficient practical and detailed information to be of real value to the smallest landowner. ("Three Acres and Liberty." By Bolton Hall. Illustrated. 435 pages. Price, $1.75. Published by The Macmillan Company, New York.)

"THE Early Italian Poets" — a translated collection that is interesting both on account of the charm of those quaint old verses and as another evidence of the poetic genius of the foremost Pre-Raphaelite — is now published in the Caxton thin paper series by Scribner. It is a convenient and beautifully decorated little volume. ("The Early Italian Poets." Translated by D. G. Rossetti. 351 pages. Price, $1.25 net. Published by George Newnes, London; Charles Scribner's Sons, New York.)

IF one is going to spend the summer in England, one of the best books to read during the long idle days on the ocean is "Highways and Byways in Kent," by Walter Jerrold. It is the work of a man who knows his English country and loves it, and who apparently has spent a good part of his life in absorbing into his inner consciousness all its history, its character and the wealth of legend that belongs to it. At any rate, Mr. Jerrold has contrived to put this quality into his book. To read it is almost as good as having lived in Kent and learned its story from the people and the old gray buildings and the goodly country itself. The illustrations are delightful little sketches in pen and ink scattered here and there through the text to illustrate this or that description. ("Highways and Byways in Kent." By Walter Jerrold, with illustrations by Hugh Thomson. 447 pages. Price, $2.00. Published by The Macmillan Company, New York.)

A valuable addition to "The Master Etchers" series is "Etchings of

Rembrandt," with an introduction, chronological list and bibliography by A. M. Hind. The book is illustrated with a representative collection of Rembrandt's etchings, beautifully reproduced in brown duotone ink on a deep cream paper. It is practically a collection of admirable reproductions of these etchings bound together with explanatory notes, and should prove a valuable addition to the library of any one interested in this fascinating medium of artistic expression. ("Etchings of Rembrandt," with introduction by A. M. Hind. Illustrated with reproductions from sixty-two original etchings. 160 pages. Price, $2.50 net. Published by George Newnes, Ltd., London. Imported by Charles Scribner's Sons, New York.)

CRAFTWORKERS will give a cordial welcome to two useful little books by Lewis F. Day. One of them is already familiar to us, being the third edition, revised and enlarged, of his "Art in Needlework," which is a book about all kinds of embroidery from the simplest outline and cross-stitch work to the most elaborate white work and ecclesiastical embroidery. The book has all the good features of the former editions and many more, and its admirably clear directions for the obtaining of different effects are illustrated by plates and detail cuts that leave no chance of confusion in the reader's mind.

The other book treats of enameling, with a technical and artistic consideration of both jeweler's and painter's enamel. The first chapters are given to the various forms of ancient enamel, the Roman, Celtic, Byzantine, Gothic and Barbarian, and the last to the historical and mechanical considerations of enamel colors. There are one hundred and fifteen illustrations showing reproductions of masterpieces of each variety of enameling dealt with in the book. ("Art in Needlework." Third edition. By Lewis F. Day. Illustrated. 274 pages. Price, $2.00 net. "Enamelling, a Comparative Account of the Development and Practice of the Art." By Lewis F. Day. Illustrated. 222 pages. Price, $3.00 net. Both imported by Charles Scribner's Sons, New York.)

A comprehensive study of the life and work of Rembrandt has been added to the well-known Duckworth Series of Great Painters. This volume is by G. Baldwin Brown, M.A., Professor of Fine Arts in the University of Edinburgh, and it goes without saying that it is a scholarly review of Rembrandt's work, although the individuality of the artist himself is not as humanly presented as it has been in some of the other books on Rembrandt. His characteristics and the romantic and tragic circumstances of his life are dealt with more in their bearing upon his art than in their effect upon him as a human being. This does not, however, detract from the value of the book, which is a valuable addition to this authoritative and highly useful series. ("Rembrandt, a Study of His Life and Work." By G. Baldwin Brown, M.A. Illustrated. 341 pages. Price, $2.00. Imported by Charles Scribner's Sons, New York.)

IN place of the conventional books of travel it is becoming almost a custom for a man or woman who specializes along one branch of art or of historical or scientific research to take a journey in the interests of his or her particular hobby and then to write a book about it which will have a certain definite significance to people who happen to be interested in the same subject.

This is what Charles Hitchcock Sherrill has done in his "Stained Glass

Tours in France," where stained glass is the object of the journey and the book, and the time and country are only incidental as a setting to the main topic. Mr. Sherrill divides his tours into centuries, examining in the course of one of them the famous examples of stained glass that belong to the thirteenth century and earlier; in another the fourteenth and fifteenth century glass, and in the third that belonging to the sixteenth century. The description of each example is accompanied with a good bit of technical information very charmingly told, and the tone of the whole book is so pleasant and intimate that the reader has almost the sense of being also a stained glass enthusiast who is privileged to see the most beautiful examples of the art in the surroundings where they were originally placed. ("Stained Glass Tours in France." By Charles Hitchcock Sherrill. Illustrated. 298 pages. Price, $1.50 net; postage, 14c. Published by The John Lane Company, New York)

GELETT Burgess, who has for many years accustomed us to his own individual brand of foolery, has perpetrated an amusing book entitled "The Maxims of Methuselah." It is very funny in spots, but in other spots it makes the reader wish that Gelett Burgess could have absorbed some more of the wisdom that probably came to Methuselah with years and experience before giving us so frankly his personal opinion of women. Not that Mr. Burgess has not hit the nail on the head about seventy-five out of a hundred times, but where he has missed it he has, to carry out the metaphor, pounded his thumb most woefully,—which is a pity in a book that is so amusing. ("The Maxims of Methuselah." By Gelett Burgess. With illustrations, decorations and cover design by Louis D. Fancher. 108 pages. Price, 75c. Published by Frederick A. Stokes & Company, New York.)

A book which should prove of much practical value to travelers who intend to visit Greece is "Greece and the Aegean Islands," by Philip S. Marden. It is pleasantly written and conveys a very clear idea of the interest to be found in modern Greece and of the character of its people, as well as descriptions of bits of history of the world-famed remnants of the ancient Greek civilization. Mr. Marden makes no effort to go into technical details concerning these works of art and devotes no time to scientific archæology, but much information is given in a pleasant and practical form, so that the book will serve as an education to those unfamiliar with the subject and as a refreshment to the memory of students who have felt the fascination that lies in the very name of Greece and have devoted more or less time to learning what it means. ("Greece and the Aegean Islands." By Philip Sanford Marden. Illustrated. 386 pages. Price, $3.00 net. Published by Houghton, Mifflin & Co., Boston and New York.)

ANOTHER book especially intended for collectors has been added to the series published by George Bell & Sons, of London. This volume deals with the collection of continental china, giving minute descriptions of the different kinds, reproductions of the hallmarks and many illustrations of the pieces themselves. There is also much historic information as to the different periods of the best known china and also a considerable amount of technical information regarding the making and decoration of many of the pieces. ("How to Collect Continental China." By C. H. Wylde. Illustrated. 253 pages. Price, $2.00. Imported by The Macmillan Company, New York.)