SELECTIONS from the MIDSUMMER BOOK SHELF.

BOOK REVIEWS

OF HUMAN BONDAGE. By W. Somerset Maugham, author of "The Land of Promise," etc. New York: George H. Doran Company.

"OF HUMAN BONDAGE" is a parable of man's life. Its climax brings one to the brink of an impassable chasm. On the near side of this abyss stands man as his life has fashioned him. On the far side hovers the glorious figure which in his dreams he has set himself to be. Here is the reality, over there the utopian mirage. And the approaches to this nearer and lesser point are all by way of tortuous roads, by way of many a cul-de-sac explored and abandoned, by way of alluring but wasteful detours. Finally, outdone and wayworn, man settles down, worlds and worlds short of the fair city of his youthful hopes. Compared with that which in his heart he longs to be, he is a poor creature, a slave in bond to the innumerable tyrants that swarm upon him out of his own body, out of the loins of his ancestry, out of the toils of immediate circumstances. So set upon, he has neither power nor disposition to discover whether or not life has design, and pattern, and goal, that might serve as guide to his own course. Perforce, therefore, he brings himself to be content with snatching here and there in a hand-to-mouth emergency of existence. Mr. Maugham tells this parable in the story of the first twenty-one years of the life of Philip Carey. Over six hundred pages of intimate detail go into the inclusive and realistic record. And nowhere in the long and circumstantial story of Philip does the writer forget that his business is to make clear the bonds in which the boy, and every mother's son of us beside, is bound and thrown. When, now and then, the horizon lightens and glows with the ineffable beauty of man's imaginings, it is only to mark the wide and unseizable spaces that lie between it and the reality. Setting the character and career of Philip Carey in the wide middle range of life, where most of the people are, Mr. Maugham objectifies the common fact of human bondage through the wide applicability of this single, concrete, convincing example. There is surpassing work here in the character of Philip Carey. And not in that of Philip alone, but in that of each of the others—Mildred, Norah, Sally and a group of lesser folks. These step out of this book and walk about the everyday streets, throwing a searchlight into the hearts of high hope and worsted endeavor to be found there. The book is a triumph in more directions than one. Its theme is as broad as human life. It reaches the high-water mark of a fictional realism that is focussed and purposeful, stamping it as a work of art as well as a picture of life. It is monumental in its proportions, yet none of it should, or could, have been omitted. It is a story for leisurely reading, for the slow absorptions with which one acquaints himself with character outside of books.

ON THE FIGHTING LINE. By Constance Smedley. New York: G. P. Putnam's Sons.

This title promises another war story. But the promise fails of fulfillment, for the fighting line extended here is that along which a girl engaged in the homely business of earning her living is compelled to deploy her forces in order to achieve this modest result, and at the same time hold on to the possession of her own being. This is a very charming story. The writer has succeeded, not only in creating a delightful heroine, but with unerring skill she sustains her throughout also in the full consistency of this original creative act. This is an ingenuous and lovable girl, who is positive that she is the most fortunate creature in a world that is none too fine to hold the noble institution of which she is a very humble part. This institution is "The Alliance Trust that underwrites companies to promote imperial interests." The girl tells her own story in the self-confessional of a diary. Here she pours out her boundless enthusiasm and her beautiful belief in any number of unbeautiful things, notably the company enshrined in her youthful adoration and also "Mr. Richard," set up as the best and noblest of her heroes. Delicacy, humor and the atmosphere of artistry are the qualities that lift this charming working-girl story out of the rut along which the majority of these plod, and place it in fresh and open spaces of wind and sun.

THE HOUSE OF MANY MIRRORS. By Violet Hunt, author of "The Doll," etc. New York: Brentano's.

A young husband. An older wife, the number of whose years is somewhat reduced by the possession of means and the grace of personal charm. What passion there is here is the wife's, a passion to hold the heart of the young man. The surest way to accomplish this, according to Rosamond Pleydell, is to feed his extravagances. Logically, therefore, her mind turns pretty completely toward material ways and means. The "house of many mirrors" is the inheritance lost to Alfred Pleydell upon his marriage with Rosamond. This story sustains itself by the schemes of the wife to regain this sacrificed estate. The outcome is an unpleasant story that ends hideously. To be sure, the day is far gone when the novel must come to a happy conclusion if it expects anything like a general welcome. On the other hand, the day is not yet come when it must end miserably in order to satisfy the judges of modern fiction. What one wishes to say is that the end of a novel lies in its beginning, that the characters, the situations, the general movement are enfolded in its initial impulse. The quarrel with this story is that it is not all of a piece, it is not one beautiful consistency, whatever the character of that consistency may be. Rosamond Pleydell is not a person. Rather is she the odds and ends of half a dozen people. One is not mean, sordid, selfish, treacherous, at one moment and wholly fine and big the next. Certainly every one has his off times, but they are of the measure of his on times. The situations here, too, quarrel too often, each with itself. The case of Lily and Baron Jean de Crawhez is one in point. This case tallies neither with its own motive, nor with the way men and women behave under similar circumstances. If one is to read an unpleasant book it should have the redeeming grace of being at least convincing and believable.

THE SEA-HAWK. By Rafael Sabatini. Philadelphia: J. B. Lippincott Company.

Backing this romance are the lusty Elizabethan days wherein both baron and buccaneer, both prince and pirate, found easy accommodation in one and the same person. Prior to the events with which this tale opens, its hero, Sir Oliver Tresillian, had sailed the Spanish Main with Drake. There his surpassing gifts at pirating had won for him a knighthood at the hands of a grateful and virtuous queen, as they had also permitted him to buttress and strengthen the tottering fortunes of the house of Tresillian. At the opening of this adventure Sir Oliver is a Cornish gentleman, engaged in the amiable art of wooing a lovely lady. It is out of this innocent preoccupation that there arises the turmoil of adventure which makes the earlier freebooting of Sir Oliver look as mild as a modern river excursion. Foul murder is done. Suspicion hovers over our hero. Immediately, at the hands of the guilty man, Sir Oliver is spirited away, set aboard a waiting vessel and borne across the sea. This is merely the beginning of the tale. When next Sir Oliver appears, he is Sakr-El-Bahr, the "Hawk of the Sea," the Muslim rover, the scourge of the Mediterranean, the terror of Christian Spain" and no end of other heart-quaking, blood-freezing powers. Having thus roughly pointed the way along which range the flashing adventures of Sakr-El-Bahr, the Hawk of the Sea, erstwhile Sir Oliver Tresillian, it is only fair to the lover of corsair tales to leave him to the fresh, first-hand enjoyment of the amazing career of this sixteenth century Cornishman who became a renegade and a Barbary corsair and "might have become Basha of Algiers," but for certain matters that contribute spiritedly to the development of this romance.

MY MARCH TO TIMBUCTOO. By Gen. Joffre. New York: Duffield & Co.

In 1893 France conceived the idea of extending her zone of influence in northern Africa from Segou, pretty well to the west, to Timbuctoo, nearly five hundred miles further east. Col. Bonnier was in charge of the expedition sent to achieve this result. Forming two important columns which were to proceed by different routes, he, heading one, sailed down the Niger to Timbuctoo, leaving Maj. Joffre to proceed by land at the head of the other. Arriving first, Col. Bonnier was, within five days after this, murdered with eleven other officers by a native Touareg tribe. This casualty placed Maj. Joffre in command of the expedition. Shortly after his return to France, Joffre was asked to write a report of this march to Timbuctoo. The book in hand is the story of that enterprise. It is obvious that the main purpose of the narrator of this event is to be accurate in every particular, to be clear, and to be terse. Under this three-fold restraint the writer proceeds to give every item of march, and camp, and dealings with the tribes, that might be of service to any force sent subsequently into this region. In addition he sets out in sufficient detail those features of the country which would be of the greatest use to the French government in its plans for developing the commercial resources of this extended zone of trade. The book, Gen. Joffre's only book, is an astonishing output of valuable fact compressed to the narrowest limits of verbal form. Aside from its intrinsic value as information about an unfamiliar area, this book has a special present value because of the war which is placing the military leaders, of France and England, at least, in the forefront of general interest. An introduction by the well known French writer, Ernest Dimnet, outlines the career of Gen. Joffre and places, besides, a literary estimate upon this story of the author's march as a soldier to Timbuctoo.

THE CALL OF THE STARS. By John R. Kippax, M. D., LL. D., author of "Comets and Meteors," etc. Illustrated. New York: G. P. Putnam's Sons.

This is a popular version of the epic story of the night sky. Designed for the general reader whose curiosity is roused and whose imagination is excited by the nightly pageant of the stars, the book is a broad and simple blend of the science of astronomy and the wealth of poetic myth and legend that an earlier day contributed to this theme. The writer divides the discussion into two parts. In the first of these he defines and describes the constellations that mark the night sky of each of the four seasons. Charts and diagrams assist the reader here to visualize the spacious sky spaces and to place the members of the various constellations. The second part deals with the sun and the planets, explaining their nature and movements and interdependencies. Many illustrations objectify the text and many allusions from innumerable sources indicate the wide interest of literature in this subject. The book is of a quality to meet, full-handed, the awakened curiosity of the nature lover, as it is admirably calculated, also, to serve as a stimulating introduction to the further pursuit of the science of the stars.

THE SOUL OF GERMANY: A Twelve-Year Study of the People From Within: 1902-1914. By Thomas F. A. Smith, Ph. D., late English lecturer in the University of Erlangen. New York: George H. Doran Company.

This all-around and intimate study of German life begins with a consideration of the formative influences of the nation, that is, with the home, the school and the church. The writer gives fireside descriptions of the German home in its common relations of husband and wife, parents and children, dwelling upon the ideas and ideals that animate and control it. He explains, also, the theory and purpose of education held by Germany as a whole, showing in good detail how this theory works out from the elementary school to the university. He traces the general influence of religious belief and practice upon the national life. He also draws from the scenes themselves pictures of the workaday life of Germany, and gives passing glimpses of its scant moments of relaxation and holiday-making. He then gathers these formative forces and brings them forward to interpret the national character as this is expressed in the adult activities of the country. At this point the writer surveys in outline the influential philosophies of Kant and Nietzsche. Looking upon the special character of all of these influences, and their sum, as the fruitful soil of materialism, the writer passes to a study of Prussian domination as the particular sun and rain that have nurtured the materialistic spirit of Germany to the double flowering of a lawful industrialism, on the one hand, and a lawless militarism, on the other. Mr. Smith was, for a dozen years, an instructor of English in a German university. Within this period he appears to have made himself familiar with the subject of the German people. It is from this close range of daily association in many fields that this study is made. The writer has used to a great extent, also, extracts from the views of prominent and influential Germans upon subjects of prime importance to the national purpose. In effect, a study sums to an arraignment of German character and aim through a perversion of the national ideal.

AEROPLANES AND DIRIGIBLES OF WAR. By Frederick A. Talbot, author of "Moving Pictures," etc. Philadelphia: J. B. Lippincott Company.

Mr. Talbot has the gift of being able to turn special language into everyday speech. The technical medium of mechanics becomes in his hands the plain words of common understanding. As he has already applied this power to the moving picture field, so he here makes use of it to place before the general reader the thrilling story of the airship. The book in hand is, in substance, a record of the achievements of aircraft in the present war. By way of this record, Mr. Talbot shows what the airship can do, and also what it cannot do, in relation to the land and naval forces with which it is associated. And this makes a fascinating story. The writer defines the different grades of airship—cruiser, scout and vedette. He describes in terms so general as not to be confusing the various type-forms upon which each grade is built. He summarizes, also, the advance made by each of the countries now at war in this particular field of military enterprise, and outlines in this connection the changes that this innovation is destined to make upon the science and art of war. Seizing the fact that one is vastly more interested in what a thing can do than in what it is, Mr. Talbot has emphasized the activities of the airship in the European war, reducing descriptions and principles to the lowest terms. The book sums, therefore, to a very readable account of the practical achievements of this amazing modern invention.

THE PUBLIC LIBRARY

SELECTED LIST OF BOOKS RECENTLY ADDED.

The following list, arranged by subjects, includes some of the latest additions to the Public Library.

The lists which appear in this column each Saturday are reprinted at the end of the month in the library's monthly bulletin. Copies of this may be obtained free at the library or will be sent by mail for 15 cents a year.

Physical Training.

Dougherty, J. H. Indian Clubs and Dumb Bells. VS-D748.
Mueller, J. P. My System for Children. VS-M913mc.
Mueller, J. P. My System for Ladies. VS-M913n.
Reilly, F. J. Rational Athletics for Boys. VS-R275ra.

Industrial Department.

Saunier, Claudius. The Watchmaker's Handbook. 1912. RCH Sa87w.
Rockwell, F. F. The Key to the Land. RGC-R599k.
Fortier, Samuel. Use of Water in Irrigation. RGFM-F777u.
Weld, L. D. H. Studies in the Marketing of Farm Products. RHDU-W45.
Albaugh, B. F. The Gardenette. RIA-Al12ga.
Thomas, G. C. The Practical Book of Outdoor Rose Growing for the Home Garden. RISE-T358p.
Woll, F. W. Productive Feeding of Farm Animals. RKAC-W835p.
Day, G. E. Productive Swine Husbandry. RKR-D33p.
American School of Poultry Husbandry. Brooding, Natural and Artificial. RKV-Am37br.
American School of Poultry Husbandry. Enemies and Parasites. RKV-Am37e.
American School of Poultry Husbandry. The Principles of Mating and Breeding. RKV-Am37pr.
Congreve, A. E. The One Maid Book of Cookery. 1913. RZ-C764o.
Wardell, R. A., and White, E. N. A Study of Foods. RZ-W213s.
Hutton, P. W. Mechanical Drawing for Industrial and Continuation Schools. SAB-H977m.
Low, D. A. An Introduction to Machine Drawing and Design. New ed. SAB-L952a.
Howe, M. A. Foundations. SDH-H833f.
Howe, M. A. Symmetrical Masonry Arches. SDL-H833s.
Carpenter, R. C. Heating and Ventilating Buildings. SJH-C226ha.
Swain, G. F. Conservation of Water by Storage. SL-Sw14.
Ivens, E. M. Pumping by Compressed Air. SLC-Iv36p.
Kirkman, M. M. Engineer's and Firemen's Handbook. SVID-K635en.
Strohm, R. T. Oil Fuel for Steam Boilers. TCBK-St86o.
Ellenwood, F. O. Steam Charts. TCS-El 55s.
Insull, Samuel. Central-station Electric Service. TE-In78.
Timbie, W. H., and Highie, H. H. Alternating-current Electricity. TEK-T492.
Rubes, Ernest. Fundamental Principles of Wireless Telegraphy. TGC-R827.
Croft, T. W. Wiring of Finished Buildings. TGDZ-C874w.
Anderson, F. I. Electricity for the Farm. TGU-An24e.
Kaye, G. W. C. X Rays. THX-K183.
Church, A. H. The Science and Practice of Management. TIB-C477s.
Roehl, L. M. Problems in Carpentry. 1913. TLN-R624p.
Weller, S. G. The Weller Ladies' Tailor. TTA-W428.
Woodbury, W. A. Hair Dressing and Tinting. TU-W854h.
Lindstrom & Almars, Minneapolis. Attractive Homes. WIM-L648a.
Lindstrom & Almars, Minneapolis. Bungalows. WIM-L648b.
McMahon, J. R. The House That Junk Built. WIM-M226h.
Saylor, H. H. Bungalows. 1913. WIM-Sa986ba.
Anderson, P. L. Pictorial Landscape-photography. WR-An248p.
Dodge Processes, New York. The Dodge Process for Photo Engraving. WRR-D664.
Faust, C. A. 75 New Alphabets. 1912. WSA-F277s.
Holme, C. C., and Halton, E.-G. Modern Book Illustrators and Their Work. WSB-H733. Reference.
Felton, R. F. British Floral Decoration. 1910. WSF-F34.
Wallick, Ekin. Inexpensive Furnishings in Good Taste. WSH-W155i.
Wright, R. L. Inside the House of Good Taste. WSH-W934i.
Kirchmaier, H. W. The New Filet Crochet Book, No. 4. WUA-K633nc.
Klickmann, Flora, ed. The Modern Crochet Book. WUA-K663m.
Schumacker, Anna. Columbia Cottons. WUA-Sch86b.
Belloc, Hilaire. The Book of the Bayeux Tapestry. WUE-B415.

Uncle Sam's Expert Cheesemakers Plan to Make Better Products Than Those Imported

Call Sent Out for Assistants in the Experimental Manufacture of Swiss, Camembert, Roquefort and Other Foreign Cheeses—Dairy Division of the Bureau of Animal Industry Has Charge of the Work—It Has Been Shown That Many Kinds of Cheese Formerly Imported Can Be Made in This Country—Overcoming the Problem Caused by Climatic Conditions.

THE recent announcement by the civil service commission that a number of expert cheesemakers are needed by Uncle Sam to assist in the experimental manufacture of Swiss, Camembert, Roquefort and other foreign cheeses is a significant one.

Up until the present time the United States has depended almost entirely upon Europe for these cheeses. The amount of cheese imported into this country has increased rapidly. For instance, during the six years from 1900 to 1905, inclusive, the value of the imports increased from $1,946,033 to $3,875,161. Italy and Switzerland supplied the bulk of this cheese, most of the remainder coming from France and Holland. The best known of the varieties of cheese imported were the Parmesan and Gorgonzola, from Italy; the Emmental, from Switzerland; the Roquefort, Camembert and Brie, from France, and the Edam, from Holland.

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Attempts have long been made in this country to imitate some of the European varieties, and in some instances the results have been decidedly successful. The announcement that an additional squad of cheesemakers is desired by the government to fill vacancies in the dairy division, bureau of animal industry, Department of Agriculture, shows that more extensive efforts will be made in future to imitate foreign cheeses. The European war, shutting off the supply from abroad, makes this new move of Uncle Sam almost imperative.

While it has been successfully proved that many varieties of foreign cheese can be made here, there are still new experiments to be made on others. The investigations conducted at the Storrs agricultural experiment station, in Connecticut, and in the experiment stations, dairy division, Department of Agriculture, have shown that cheese of the Camembert type, equal in every way to the imported article, may be produced in the United States. The results obtained make it practically certain that cheese of the nature of Roquefort or Stilton can likewise be produced in this country.

Recently a cheese buyer for a large concern in Chicago visited the experimental dairy in the bureau of animal industry here, and tasted the Roquefort cheese. This expert, whose palate has come in contact with hundreds of different varieties of foreign cheese, declared that he could scarcely note the difference between the foreign Roquefort and the experimental variety, and that, if anything, he preferred the flavor of the latter. This proved highly flattering, for those experimenting with Roquefort, the famous French cheese, have necessarily worked under handicaps.

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In southern France, where, for hundreds of years, this delicacy has been made exclusively, artificial ripening is not necessary, as is the case in this country. It is placed in caves and rocks, and reaches maturity in a natural fashion. Here it is necessary to use special apparatus and force the temperature in curing. Then, too, in France sheeps' milk is used entirely in the manufacture of Roquefort. The cheese being made in this country is from cows' milk.

The least successful of all the experiments made with foreign cheeses so far has been that with Swiss cheese. These experiments have been going on for several years. At the present time a number of chemists, bacteriologists and cheesemakers have been co-operating to determine why the Swiss cheese made here is not as good as that made abroad. However, a much better variety of Swiss cheese has been turned out in the experiment dairy station than in the American factories. At present five cheesemakers are working on Swiss cheese in the experimental station, while one is acquiring valuable knowledge in a model Swiss cheese factory located in southern Wisconsin. One woman and three men are working on soft cheese here.

The feed, pastures, climate, topography and other conditions so different from those in Switzerland, where the present system of Swiss-made cheese manufacture was developed, naturally call for changes which could not be made in the absence of a knowledge of the causes which underlie the processes of cheesemaking. Another contributory cause of low-grade American-made cheese has been the inadaptability of many of the cheese factories; their fitness for cheesemaking has sometimes been sacrificed to cheap construction. So many difficulties have been experienced that cheesemakers were led to believe that it was impossible to make a good Swiss cheese except in a few localities. Some believed, in fact, that there was no place in the United States where the product would equal in quality that made in Europe, since the same methods were used on both sides of the Atlantic. However, Uncle Sam believes that his experiments in the manufacture of Swiss cheese will eventually prove quite as successful as those he has carried on with other foreign cheeses.

The main trouble in making Swiss cheese is known to be caused by the development of undesirable types of micro-organisms, some of which produce abnormal gas, causing what is known as "nissler" or "pressler" cheese. These undesirable organisms cause a lack of uniformity in the formation of the eyes. In some cases no eyes whatever are developed.

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The experimental dairy or cheesemaking laboratory, while limited in space, is equipped with the very newest machinery. The dairy room and the curing rooms are kept spotlessly clean. The appetizing odor of newly made cheese and the sight of the tinfoil-covered molds, revealing here and there a piece of ivory-colored cheese dotted over generously with greenish mold, is enough to arouse the most dormant appetite.

One of the cheesemakers connected with the experiment station, who proudly displayed several prize cakes of Rouquefort made there, was asked to describe briefly the process of manufacture. One can only realize how great an art cheesemaking is, and what extreme care must be exercised in order to turn out a perfect product, after one has read his outline of procedure.

"We usually take about forty pounds of milk, to which we add the starter," he said. "This is heated to about 86 degrees Fahrenheit. Rennet is added at the rate of three ounces per thousand pounds. The milk is allowed to set for about two hours. Then it is cut with a curd knife in small pieces about the size of a walnut. It is then allowed to rest for about ten minutes, after which it is dipped on cloths to drain. After about one hour it is dipped in forms of about nineteen centimeters in width and sixteen centimeters high.

"After this the mould is sprinkled into the cheese, first a layer of curd being used, then a layer of mould, and so on. After the mould has been added, it is turned over two or three times during the course of the afternoon. Then it is allowed to drain about six or seven days at a temperature of 68 or 70 degrees Fahrenheit. After about three days it is salted twice at a temperature of 50 degrees Fahrenheit. The cheese is then pierced with a steel rod twenty or thirty times to allow the air to reach the mould. It is then placed in a room which has a temperature of 45 degrees Fahrenheit and a humidity of 95 degrees. It is left in there for about three months, when it is wrapped in tinfoil and placed in the curing rooms for two months, after which it is ready for the table."

An interesting feature of the manufacture of Camembert cheese in the dairy division is the inoculation system. Although it is not customary for French cheesemakers to inoculate Camembert cheese with mold, it has been found very desirable here. Under the conditions in Normandy the cheese acquires its moldly covering rapidly enough by accidental inoculation. Even then undesirable molds often appear to the injury of the cheese. In the experimental work artificial inoculation on the day of making has been necessary to secure satisfactory results.

Those experimenting with these foreign cheeses believe that where dependence is placed upon accidental inoculation undesirable molds often get on the cheeses ahead of the Camembert mold, the result being either a poor cheese or a spoiled one. On the other hand, if a cheese is inoculated with the Camembert mold at the outset this will grow and cover it rapidly, practically protecting it from infection of other molds. A good proof of this statement, say experimenters, is that one can almost always find some other species of molds on imported cheese, while the molds found on inoculated cheeses are usually pure cultures, unless the culture with which they were inoculated was of poor quality.

The system of inoculation used in the experimental station is to take a small jar with a tin cover which has been punched full of holes, like an ordinary pepper box, fill it half full with water, add a piece of moldy cracker or piece of cheese with a good growth of the proper mold, and shake thoroughly. The contents of the jar are sprinkled upon the surface of each cheese, then the cheeses are turned and inoculated in the same manner on the other side.

Another interesting feature connected with the cheesemaking is the ripening. When the cheeses are finished they are removed to the ripening room. Here they are placed on smooth boards upon shelves. The cheeses remain on these boards during the whole ripening period. Cane bottoms are preferable to the boards, for when boards are used the molds are apt to grow into the wood, causing the latter to stick so tenaciously that on turning the cheese over the rind is torn off. On the other hand, when cane bottoms are used the mold can grow more uniformly on both sides of the cheeses, and as they do not stick to the bottoms it is necessary to turn them but once or twice in the first room.

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During the first week any ripening which occurs is not noticeable, and the cheese remains in the form of hard curd. The surface of the cheese often becomes slightly slimy, and some change in the color can be noticed. Toward the end of this first week the mold can be seen upon looking closely.

During the second week the mold, when once started, grows very rapidly, and in the course of one or two days it covers the cheese completely, giving it a snow white, cottonlike appearance. This white coat turns to a gray-green within two to four days, and by this time the cheese begins to show actual ripening.

If the cheeses remain upon the shelves in the ripening room under proper conditions, as they often do in France, they will ripen completely. But under conditions here, where the air is drier, it has been found necessary to wrap the cheeses during the second week in parchment paper or tin foil. The time of wrapping affects the kind of cheese produced, and the intensity of the flavor can be partly regulated in this way. If a cheese with a strong flavor is desired, the wrapping must be done when the cheese is only slightly covered with white mold.

In the making of Camembert cheese, as in making any other kind, the experimenters have encountered numerous difficulties. One of the most common troubles is that arising from gassy curd. In this case the fault generally lies in the milk, being due to gas-producing bacteria. Another difficulty is caused by yeast. The cheeses often become covered with yeast in the making room, although sometimes the yeast makes its appearance after the cheeses have been taken to the ripening room. The surface of such cheese becomes slimy and sticky, causing it to stick to the boards.

Contamination from other varieties of mold causes considerable trouble. If the cheeses contain spots of green or brown mold, or if a long, fuzzy mold, sometimes with black tops, appears, the Camembert mold cannot grow properly, and the result is often a bitter cheese or one with other undesirable flavors. When such infection from foreign molds occurs, it is necessary to sterilize the whole equipment, and the walls and floors of the making as well as the ripening rooms must be cleaned and whitewashed. This objectionable mold is exterminated by the same method as one ventilates a house to overcome disease germs.

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The drying out of cheese is caused by lack of moisture in the ripening rooms, or by too rapid draining of the curd. A defect just opposite of the last is found in wet cheeses. It is caused by too low temperature of the making room, as well as by too low a degree of acidity of the milk, both of which retard the draining of the cheese.

In the making of cheese the government experiments found that a very important item is that of protecting the cheese against flies and other insects. Outer doorways, windows and every other possible opening is carefully guarded by screens with as fine mesh as can be procured, as the smallest flies produce the most trouble. In the ripening room protection against these insects is secured to a considerable extent by keeping the rooms dark, for flies do not readily breed and multiply in a dark place.

The government first started experiments on the soft foreign cheeses at the Storrs agricultural experiment station in Connecticut several years ago. Not long afterward experiments were made in the bureau of animal industry. During all this time Uncle Sam has been making determined efforts to manufacture as good cheeses, if not better, than those made abroad, regardless of the fact that climatic and other conditions in this country would appear to make this almost impossible.

He has succeeded, after long years of careful experimenting, in producing highly satisfactory brands of Camembert and Roquefort, and he plans, with the assistance of the expert cheesemakers who will augment his staff after the September civil service examinations, to imitate all the foreign cheeses possible, thus making Americans independent of the European cheesemakers, who are just now too busy fighting to make cheese for the hungry neutrals.

COPPER BOILER FOR MAKING SWISS CHEESE.

INTERIOR OF THE CHEESE-CURING ROOM.

"STORM OF STORMS" LAYS WASTE TO AMERICAN SAMOA

DEVASTATION has claimed American Samoa for its own. It came on the typhoon wings of the great-grandfather of all the storms which swirled down over the little South Pacific naval station of the United States last January, sweeping the little island clear of vegetation, wiping out villages with a single breath, sponging all traces of agriculture so cleanly from the face of the land that it is now difficult to discover their previous locations, and threatening the 2,100 inhabitants with starvation.

Details of the "storm of storms" has just reached the Navy Department from Surgeon Edward G. Parker of the United States Navy, transmitted through Gov. J. M. Poyer of the American group.

Surgeon Parker was an eyewitness of the devastation wrought by a storm the gigantic forces of which can hardly be realized by dwellers in temperate latitudes. To his own experiences he has added information given him by the natives, many of whom have had to be removed from the Manua Islands of the group so that what little remains of natural resources in the territory might sustain the lives of those who still inhabit it.

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According to Surgeon Parker no typhoon or tidal wave in the history of the Pacific islands has equaled the titanic battle of wind and wave unless it might be the typhoon of January, 1889, in which the German man-of-war Nipsic and several ships accompanying her were driven ashore and lost. A wind of terrific velocity, sand-laden and accompanied by earthquake shocks, thunder and lightning, created such havoc in the island that it is regarded as miraculous that only a few outright fatalities were reported.

Surgeon Parker, in his report to the Navy Department, says:

"The first impression one received upon approaching the devastated island was the marked change in color of the general landscape. Where once the island lay fair with the intense tropical green of luxuriant foliage the whole country appeared sere and brown and broken. Fallen timber and debris which suggested the ravages of a forest fire in a timber tract covered the gentle slopes which rise from the sea. The islands were desolate wastes, devoid of a single sprig of green.

"The village of Ofu suffered terribly from the violence of the storm. Of seventy-four native houses not one remained standing, and a pile of shattered concrete marked the site of the church, which was built with substantial walls and corrugated roof. Six houses of European construction were razed to the ground. Highways were completely obstructed by debris. Tall cocoanut trees cast down by the storm had smashed every boat in the village, the fragments of which were caught by the wind and swirled out to sea, so that no trace of them remained.

"Although the Island of Ofu is not particularly low, the sea was beaten so far inland that the island was entirely under water and some fish which were stranded were obtained by the natives for food.

"The natives insist that the great wind swirled upon them from every point of the compass, but from the havoc wrought it is evident that it came from the southeast. The blast was most severe, according to the natives, between the hours of 1 a.m. and 3 a.m. January 10, when the wind came in tremendous gusts, and the intense darkness was split by blinding flashes of lightning and deafening roars of thunder, accompanied by an earthquake shock which literally hurled people from the ground.

"The destruction on all sides was so great that each group of three or four survivors regarded themselves as the sole members of the population to escape the fury of the storm. Many of these groups became separated by being literally blown apart, while others saved themselves from being lost in the darkness by throwing themselves on the ground and obtaining a precarious hold by digging their hands and feet in the sand."

* * *

The details of the storm, together with a report of the starvation conditions which have followed in its wake, has been again called to the attention of the American Red Cross Society, which at the time of the typhoon and tidal wave contributed $2,000 toward the relief of the stricken natives. But, says the official account, the situation today in American Samoa calls for expert and continued relief work.

Starvation conditions which now exist upon the American islands among the natives are due primarily to the fact that the great storm, obliterating and destroying the taro patches, devastating the cocoanut groves and uprooting the banana plantations, has left the island with practically no food resources.

"The situation presented by the wholesale destruction of the taro crop, which must be regarded in Samoa as the staff of life," says Surgeon Parker in one of his reports to the governor, "must be regarded as most serious, and not only was the entire crop practically wiped out, but that which remains has been attacked by parasites and destroyed, as has been the new crop planted just after the typhoon. It is most disheartening in that the ultimate recovery from the famine is as far away as it was four months ago, for the islands now not only have no taro, but have a destructive agent working against its further production.

"As matters now stand the best that can be hoped for is that the Samoan may have taro again in about eight months, provided the worm which is destroying it can be successfully combated at once.

"There will be bananas, but in small quantities only, in about six months, and the officials are confronted with the problem of feeding some two thousand islanders from outside sources for a period of from seven to eight months.

"There is but one ray of hope in the general situation. I am informed that these taro worms which are responsible for the shortage of the crop thrive only in the dry weather, and the advent of wet weather will destroy them. Yet a relentless warfare must be waged vigorously and every taro worm killed."

Surgeon Parker states that although Congress appropriated $10,000 and the Red Cross gave $2,000 toward the relief of conditions in the islands, the fund is now painfully low and its exhaustion is to be reckoned with at no distant date.

Getting Rid of an Inventor.

WHEN Gen. Miles was at the head of the army he used to be continually besieged by cranks with pneumatic firing guns, dirigible war balloons and other martial inventions. But the general would weed these cranks out with admirable speed. An inventor in his office one day tells of a curious incident in this relation.

A card was brought in and laid before the general.

"Oh, send him in," said Miles. "His business won't take more than a minute or two."

So in came a wild-eyed, long-haired man twisting his soft hat nervously in both hands.

"General," he said, "I have here"—and he took out a small parcel—"a bulletproof army coat. If the government would adopt this——"

"Put it on; put it on!" said Gen. Miles. And he rang the bell. The clerk appeared as the inventor was getting into the coat.

"Jones," said the general, "tell the captain of the guard to order one of his men to load his rifle with ball and cartridge and——"

"Excuse me, general, I forgot something," interrupted the inventor. And with a hunted look he disappeared.

Blaine's Tact.

A MAN long in the diplomatic service of the United States tells this story:

One of the qualities for which the late King Edward was most admired was his tact, a quality also possessed in no slight degree by James G. Blaine, who was once the guest of Edward, then Prince of Wales.

Edward had, both as prince and as king, always insisted upon showing his friendship for Americans and things American. One incident that particularly impressed the man who tells the story was that which took place at a dinner to which Blaine had been invited as the guest of the prince. It was prior to Blaine's nomination for the presidency. Knowing that the prince took special delight in honoring Americans, the other guests were generally most gracious to Blaine. The one exception was a duke of the royal house, who had a reputation for boorishness and lack of tact. During a lull in the conversation after the coffee this nobleman blurted out:

"The greatest outrage in history was the revolt of your people against King George III. There was no justification for it then and there is no excuse now."

The prince was visibly embarrassed. Perhaps no man but Blaine could have carried off the situation. While the entire gathering sat in silence Blaine replied, in his carefully modulated voice:

"Perhaps, my dear sir, if George III had had as much diplomacy and as wide a knowledge of his people as his great-grandson possesses America might still be English."

The prince at once turned the subject to the relief of all present, but the teller of the story saw him grip Blaine's hand with a twinkle of admiration in his eye at the end of that function.

Government Side Lines.

THERE are foreign municipalities as well as foreign governments that do not think it beneath them to add to their revenues by "a side line or two."

The city of Paris, for instance, increases its revenues by a few francs each year in the cultivation of a little state orchard in the Luxembourg gardens, and the same municipality also takes its share of the recenpts of the Eiffel tower.

A curious revenue accrues to the city of Palermo, which makes commercial use of its snows from the mountains. The Sicilian snow is brought down at night in baskets and shipped to the neighboring towns, where it is sold for refrigerating purposes.

The Greek government has a most profitable side line in its monopoly in playing cards, from which it derives a handsome income.

The Russian government once undertook, to its profit, a deal in junk. It was just after the Crimean war, when for months old iron, shot and shell were picked up around Sebastopol. A regular trade in this junk sprang up, thousands of tons being sold. Finally it struck the government that the idea was such a good one that it would take a hand itself. It thereupon intervened between buyers and sellers, imposing a tax of about 10 cents per hundredweight. It was estimated that the imperial government profited in this way to the extent of $80,000.