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## CHAPTER XVI.

Much has been written about Egypt and its soil; but in giving here an account of its possibilities and prospects for cultivation in the ways of modern farming, some repetition is necessary. It is fair to say that the soil of Egypt is one of the richest in the world. It is alluvial, ranging from the heavy argillaceous to light loam. It varies, too, in its fertility, and in low-lying lands is frequently impregnated with salt. This is generally owing to want of drainage. When properly treated and flooded with water it soon becomes what is technically known as "sweet," and available for the growth of crops.

Very rich soils are to be found in the provinces of Menoufieh and Charkieh, while those of Beherah are flat and generally low-lying; but the depth may range up to forty feet!

The preparation of the land for the various crops is not what may be termed difficult, although in the heavy black lands powerful draught oxen are required for the ploughs and other implements. But with irrigation at command, and abundance of moisture becoming more and more common in connection with the modern dams and canals, if the land be hard and baked it can be flooded with water as required, when it quickly becomes in a friable condition, and hence comparatively easy to break up.

In the Delta such conditions are never experienced as frequently are encountered upon the heavy clays in England, where the land becomes so hard that it cannot be tilled.

Possessing the qualities of richness, vast depth of soil, and a glorious climate, it is not surprising that with the steady developments of the Khedive's country and the safety and security enjoyed under his enlightened rule, accompanied by the example he is setting in his experiments for the advancement of Egyptian agriculture, the price of land has risen enormously. Within the last few years one hundred pounds per acre is quite a common figure; but that which is unreclaimed can still be purchased for from fifteen to thirty pounds. This, of course, necessitates an additional outlay, which is, after all, quite a moderate sum, upon improvements, when it will yield a good return of profit.

The Egyptian agriculturist divides his year into three portions:

SUMMER, from April 1st to August 1st.

NILEH, from August 1st to December 1st.

WINTER, from December 1st to April 1st.

But it must be remembered that the Egyptian winter would be better named balmy spring.

As this little work is written primarily for those who take an interest in the progress of a favoured country, and who may possibly be looking towards the East with the eyes of investment, or for a future home where they may lead a Virgilian or bucolic life, it is proposed to give here a simple, business-like account of the various processes and

preparations made for the growth and harvesting of the different crops sown in the above seasons:—

WINTER CROPS: Clover, barley, beans, and wheat.

SUMMER CROPS: Cotton and sugar cane, and also maize.

NILEH CROP: Maize alone.

ROTATION.—A three years' rotation is the one generally practised, although there is a tendency to limit it to two years.

It would be as well to consider the crops as they succeed each other, beginning with the cotton.

A great deal of interest attaches to the growth of cotton in Egypt. It was largely cultivated by the ancient Egyptians, and its products utilised, but after a time—it is impossible to say how long, possibly during the great changes that took place during incursions, conquests, or change of rulers—its growth died out to such an extent that a few generations back, as an article of utility, its cultivation had pretty well ceased, and cotton was scarcely known, save as a decorative shrub in the gardens of Cairo.

But during the reign of the Khedive's ancestor, Mehemet Ali, a man of great foresight, full of determination for the advance of his people, he completely grasped the idea that Egypt was one of the most suitable of countries for the cultivation of the cotton tree, and that it ought to be produced in his dominions instead of dependence being placed upon importation from other lands.

In pursuance of this idea, he began to make

experiments, testing it, so to speak, by forming plantations. These turned out so well that he proceeded to take further steps, and with great enterprise commenced the cultivation upon a large scale. Many thousands of the Egyptian acres were planted in the lower provinces, and to a far greater extent planting was carried on in the rich lands of Upper Egypt bordering on the Nile.

The little trees responded freely to the Egyptian cultivation; the rich, irrigated soil, yearly replenished by the sediment left by the floods, proved that the ancients were right, and wherever the land was deep the results were most favourable; while where a bad selection had been made, and the soil was shallow and inferior, the return of the pods, or technically *bolls*, was poor.

The method of its cultivation will be given in extenso farther on, but it will be as well to note here, in regard to the enterprise which turned Egypt into its present state as one of the great cotton-growing countries of the world, that the seed was originally imported from Brazil, though it is undoubtedly a native of Northern Africa; and at the present time the returns are very great.

The preparation of the land for the growth of cotton commences in January. The seed is sown from the middle of February till the middle of March, and the cropping harvested, or picked, about the end of November; while previous to the last picking of the soft woolly pods, clover seed is sown amongst the standing cotton trees.

This, so to speak, stolen crop provides a supply

for horses, cattle, and sheep till the end of June; for it must be borne in mind that Egypt is not a land of fields and meadows enclosed by hedgerows; hence grazing for cattle is the result of foresight, and has to be provided as required.

On the land not sown with clover, and at the end of the cotton harvest, after the little trees have been uprooted, a crop of beans is sown, which becomes ready for harvesting in April; and now there is a period in which the agriculturist may take his choice of sowing what may be termed catch crops, or fallowing his land for five months. In this he is guided by position and the facility offered for the disposal of such easy crops as water melons or maize, which can be taken after beans.

It is at the end of October that he begins to think of his main crops, when wheat and barley are sown, to be harvested from the beginning of May to the end of June. Then follows the main crop of maize, which occupies the land from July 15th to November 15th.

Previous to the harvesting of this main crop of maize, clover is again sown, and from this one or two pasturings are obtained before the land is broken up once more for the succeeding important crop of cotton, this completing the rotation.

The sugar cane has not been given a place in this rotation, as it is principally grown in Upper Egypt for the manufacture of sugar, while we are dealing with the rich lands of the Delta and the farming there. But we may here remark that the Egyptians are as fond of the green sugar cane as an article of diet as the blacks of the West Indies, who may be seen munching its luscious saccharine at all times and seasons.

There is something more in this among the Egyptians than the gratification of a sweet palate, for it is eaten largely from the great faith of rich and poor alike in its tonic qualities. "Gasab," or as they pronounce it in Cairo "'asab," is considered to be one of the greatest restorers for those who from weak health or excess are what we call in modern phraseology "run down"—perhaps as pleasant, plentiful, and economical a medicament as could be used. It is a common sight for the European to see the poor, patient, overladen, and underfed donkeys coming into Cairo every morning heavily laden with the juicy canes that have been grown in the neighbouring fields.

It will be observed in the above rotation that a crop of clover precedes and succeeds the cotton.

We now proceed to a technical statement of the treatment of an Egyptian farm; not merely a description of farming in Egypt, but of the management of a farm based upon the careful observations of one who has passed many years in the Delta and has made the cultivation and cropping of its peculiar soil a thorough life study. In fact, the tracts of land under his superintendence offer themselves as specimens worthy of copying by all who seek to make the land of Egypt profitable and well paying in return for the capital, large or small, that may be invested there. This being said, we

at once plunge again in medias res, and, at the risk of being too formal and technical, recapitulate the crops in their order.

COTTON.

Followed by

CLOVER, or BEANS, or both.

Followed by

FALLOW, or catch crops of MAIZE or WATER MELONS.

WHEAT and BARLEY.

Followed by three months' fallow, or MAIZE, main crop, and catch crop of SESAME.

CLOVER—"Fachl" on land after Maize and Clover "Miscowy" after Fallow. Then COTTON.

## CHAPTER XVII.

WE will take an estate of three hundred acres, and on inspection, say in the month of March, the crops occupying the land under the following rotation will be as under:—

Three Y	Tears'	Rotation.	Two	Years	' Rotatio	on.			
	Marc	ch.		March.					
100	Acres	Cotton	150	Acres	Cotton				
50	,,	Clover	30	,,	Clover				
50	,,	Beans	40	,,	Beans				
80	,,	Wheat	60	. رز	Wheat				
20	,,	Barley	20	,,	Barley				

Within the last few years there has been a tendency to increase the cotton crop and adopt the two years' rotation; but it is not a good practice, as it tends to exhaustion of the soil, especially where there is a want of farmyard manure. The cereal crops also suffer from the consequent lateness of sowing.

Two crops off the same land per annum: Wheat, sown November 15th, harvested May 30th; maize, sown July 15th and harvested November 15th. Or clover, sown November 1st, first crop January 1st, £3; second crop March 15th, £3. Sow cotton in end of March. Ground clear, November. Probable gross return per acre, £24.

We might multiply instances where two separate crops can be grown on the same land in twelve months, such as maize followed by potatoes, etc.; but it may be safely stated that a very small area of a well-appointed farm is allowed to lie fallow, the land being continually under some crop or another.

A few remarks on the before-mentioned crops as to cultivation:—

Cotton is the principal crop in the rotation, and gives far the best monetary return, while at the present time reports from the Egyptian Soudan are beginning to speak very highly of the alluvial tracts between the White and Blue Niles as being more favourable to the growth of cotton than the lower portions of the Nile Valley, while affording ten times the area for the planting of this important staple that can be had in the lower

portions of the Delta. In fact, matters seem to prove that Upper Egypt is going to develop into the finest cotton-growing country in the world.

The preparation commences in January, and generally three ploughings are required to bring the land into a proper tilth. The more thorough the cultivation the better for the crop. The land is then thrown into ridges measuring from crest to crest three feet. Then a pair of ridges is drawn across the longitudinal ridges, the distance between each pair of ridges (which form a waterway) being twenty-two yards. Between these pairs—i.e. eleven yards distance from each—a single ridge is This acts as a partition to stop the water. Six ridges are irrigated by allowing the water to flow from these cross-waterways, and the reason for confining the length of the ridges to eleven yards is to ensure the evenness of the irrigation as to height of water level, as the ground may have slight fall, and if the whole length of the ridges were to be watered at once the water would rise too high at the lower parts before the higher levels were properly soaked.

The sowing commences February 15th. Boys and girls drop the seed in clusters of, say, twelve seeds in set holes made by a pointed stick on one side of the ridge, two-thirds from the bottom of the furrow, and at a distance of sixteen inches between each set hole.

After "planting," the ridges are watered, care being taken not to allow the water to rise to the level of the seed. Sufficient moisture for germination is derived from capillarity. The seeds shoot and the plants appear above ground in from ten to twelve days. Twenty-five days elapse, and then a light hand-hoeing is given, while after fifteen days more the plants are thinned, two or three being allowed to remain in each set-hole.

Immediately after thinning the young plants receive their first watering. After, say, twelve days a second hand-hoeing is given, and again after twelve days a third. Then comes the second watering, by means of trench and canal. After an interval of ten days another hand-hoeing is given, and this finishes the task, as the cotton trees have attained a height which precludes the possibility of using the implement.

At intervals of from ten to fifteen days six waterings are given. This brings the grower to the time—about September 10th—when the crop is ready for the first picking. Women, boys, and girls pluck the cotton from the trees. Eight to twelve of the workers may pick an acre per day, and they receive as payment one shilling per 100 pounds. At the conclusion of the picking the field is irrigated again, and after twenty-five days the second crop is dealt with. Another irrigation follows, time is given for development, and then comes the third and last picking.

The cotton trees are next cut close to the ground or pulled up by the roots, and are utilised as fuel.

An average crop on good land may produce 1,890 pounds of raw cotton, which on being ginned

will yield 600 pounds of fibre. The raw cotton—i.e. in seed—is sold per 375 pounds at, say, £3. This will gin out, say, 105 pounds fibre and 205 pounds seed; so that the total worth of the crop may be estimated at £18, exclusive of the value of the wood, which may be placed at 4s. per acre. These figures are often exceeded where the cultivation is well attended to.

Cost of raising of	ne aci	re of c	otton	in :	Egy	/pt :-	
0				£		d.	
Three Ploughings	·			ő	12	O	
One Ridging				О	4	O	
Dressing Ridges				О	2	O	
Planting				О	O	IO	
Seed				О	5	o	
Wages for Nine I		О	5	6			
Six Irrigations by		О	15	O			
Three Irrigations	О	O	O				
Three Cultivation	ns by	Hoe		O	7	O	
Three Pickings				I	O	o	
Pulling Trees			• •	O	3	O	
					A-A		
7	-			£3	14	4	
Farmyard Manur	О	10	0				
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The varieties of cotton grown in Lower Egypt are Mit-Afifi, Abbassi, Yannovitch; in Upper Egypt, Ashmouni.

Generally speaking, the quality of Egyptian cotton is of a high grade. Its fibre is long, fine, and at the same time strong.

Unfortunately this country has pests, not like the old Biblical plagues, but which give much trouble and do a certain amount of damage to the cotton crop. Among these are the cotton caterpillar and the boll-worm, the former being propagated from eggs deposited by a moth, which do great damage if allowed to hatch, by the larva feeding upon the plant. If the leaves upon which the eggs are deposited are pulled and burned, this mitigates the destruction so far as it is successfully carried out. The boll-worm bores into and feeds upon the heart of the young bolls, and thereby totally destroys them for the production of fibre. Up to the present no remedy has been found to prevent the ravages of these pests. The damage may amount to 20 per cent. Fogs and dews in the month of October also cause injury to the bolls.

Beans after Cotton.—This crop may be sown at any time during the month of November, the earlier the better. The beans may be either sown broadcast or dropped into the furrow, behind the native plough. The quantity of seed required is two and a half bushels. The land must be very moist, or an irregular germination of the seed will be the result. The crop receives the first watering thirty days after sowing, or immediately before flowering, and again when the beans have formed in the pod. Harvest will commence about the middle of April. Men, women, and boys pull the crop by hand, breaking the stalks close to the ground, sometimes uprooting them, but a small

serrated hook is also used to cut the stalks. Six hands will reap one acre per day, and the payment is in kind, at the rate of one sheaf per thirty. The crop is then carted to the threshing-floor, spread out to dry, and threshed by the Norag; or, as modern implements are creeping into use, by a steam threshing machine made by one of the famous English firms.

This crop does not receive any manure, but requires a rich, heavy soil, when under favourable conditions a yield may be expected of from twenty-five to thirty-five bushels per acre—price per five bushels, £1. Occasionally this crop is damaged by hot blasts—"Khamsin winds"—which shrivel the bean, especially if they occur when it is soft. We have also the pest of broomrape; and if badly infested by this weed, great destruction follows to the crop. Beans are the main feed of working bullocks, milch cows, and donkeys.

Catch crops, on land after beans.

MAIZE (summer).—Sown end of April, ready to be pulled after sixty days. This crop is consumed by the natives, who roast the cobs. Cost of raising one acre, £2 10s., exclusive of rent. Gross value of crop may be approximately £10.

Water Melons.—Sown at the same date, ripe after eighty days. Cost of raising, £3 10s. Probable value of the produce of an acre, £12. After these crops have been harvested the land is fallowed for three months. During the fallow it receives two or three ploughings, and is flooded with water to prepare it for sowing the cereal crops.

EGYPTIAN CLOVER (Trifolium Alexandrinum).— After Cotton.—This crop may be termed the preserver of Egyptian agriculture, since, as previously alluded to, it provides pasturage for horses, cattle, sheep, camels, mules, and donkeys, for a period of seven months, and also taking into account its beneficial effects on the soil, restoring fertility by root residue containing nitrogen. Sown in the end of October amongst the standing cotton trees, the seed falls upon the newly irrigated soil and takes root, no covering being required. Sixty pounds of seed is sufficient for an acre. The first crop should be ready for pasturing at the beginning of January; second crop, seventy-five days; third crop, forty days; fourth crop, thirty-five days' interval.

This variety is named "Miscowy," and stands copious watering. The first and second crops contain about eighty per cent. of moisture. The third crop may be made into hay, and the fourth crop—part only—may be threshed to furnish seed. The gross weight of the four crops, cut green, may be estimated at thirty tons, or five tons of hay. The work-bullocks, cows, buffaloes, horses, etc., are tethered by a rope attached to their fore-legs and fixed to a peg driven into the ground, the cattlemen moving the animals forward as required. The cattle lie out at night while pasturing on the clover.

If the crop of clover is near a large town where dairymen require green pasture, the price per feddan, to be consumed on the land, may be put at £4, £3, £3 10s., £3 10s. for the four crops, or a total of £14. Growers are sometimes troubled by

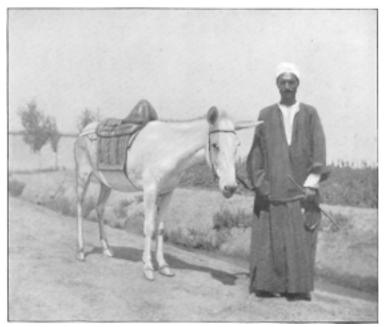
attacks of cut-worms, which ravage the young shoots of clover; but flooding with water often destroys the pest. There is also the parasitic weed Dodder (Cuscuta Trifolii), which occasionally does damage to the crop. The cost of five bushels of clover seed varies from  $\mathfrak{f}_{\mathfrak{I}}$  ros. to  $\mathfrak{f}_{\mathfrak{J}}$  ros., according to supply and demand. The variety "Fachl" clover occupies a separate place in the rotation, and will be treated later.

WHEAT.—Varieties: Common wheat, Bocchi, and Indian. The Bocchi, a white wheat, is extensively grown. The third, a reddish wheat, has recently been introduced from India, and gives good crops. Egyptian wheats are hard, but are deficient in albuminoids. Unfortunately, care is not taken in selecting the seed, and many samples are badly mixed with red and white varieties. The crop is sown on fallow land after clover and beans. The land, previous to sowing the seed, has received a watering. Fifteen to twenty days after, the seed —two and a half bushels—is sown broadcast, and is ploughed in by the native plough. The sowing is very often imperfectly performed, the distribution of the seed being very irregular. The next process is rolling by drawing a baulk of wood (see illustration), three yards long, over the land; then ridges are made seven yards apart to regulate the even distribution of water.

Somewhere about twelve days after the sowing the shoots appear above ground, when the "braird" is about four inches high. Occasionally there is an attack of "grub," or cut-worm; but the damage is never serious, a watering destroying the pest, and some seed sown on the blanks caused by the worm soon make good the damage. Rolling with a press roller has been found to materially stop the destruction. Eighty days after sowing, or when the crop has attained a height of two feet, it receives its first watering; forty days afterwards its second and last. Sixty days after the final irrigation the crop will be ripe for harvest. The method of harvesting—reaping—is by small hand hooks, men, women, and boys turning out to work at midnight, reaping till seven a.m., subsequently gathering the unbound sheaves into rows, and afterwards gleaning, finishing up about nine a.m.

The foremen then distribute to the reapers one sheaf for thirty-five, as payment in kind. reason for reaping the crop by night is that, if performed in the daytime, while the heat is great, the grain would shed, the dews at night preventing this loss. Reaping by self-binders has been tried, but the shedding of grain was excessive, as they could only be worked in the daytime; while the farm labourer was not qualified to work such a complicated machine. Labour is so cheap that it is not necessary to resort to labour-saving machinery. The sheaves (unbound) are transported from the fields to the threshing-floor by camels, carts drawn by oxen, or mules. The sheaves are then placed in a circle measuring twenty yards in diameter. Four, five, or more pairs of oxen, each pair attached to a Norag, circle round on the top of the grain, and when it has been threshed out and the straw cut and

bruised by the revolving discs and the feet of the oxen, it is thrown into a heap in the centre. Fresh sheaves are added to the circle as they arrive. When all the grain has been threshed the next process is the winnowing by throwing the cut straw and



FOREMAN OF FELLAHEEN.

grain into the air vertically by means of a five-pronged wooden fork. The cut straw, Tibn, is carried by the wind to a distance, while the grain falls near to the operator.

The payment to the winnower is at the rate of fourpence per five bushels. Threshing and finishing machines, made in England, similar to the one

illustrated, are used on all the large estates, and perform the work quicker and cheaper than the Norag, and of course they are much cleaner, the straw not being trampled and defiled. They are complicated, owing to the fact that the straw must be chopped and rendered soft to the touch, as the oxen will not eat it when it is not bruised—a serious matter, this, in a country where cattle are almost entirely fed upon straw. It might be argued that, as in England, the wheat and other stalks might be cut up by machinery into chaff; but the explanation is simple. The haulm or stalk of cereals in a hot country like Egypt grows harder and more woody than that of colder climates, and when simply cut up into chaff the product is so harsh that the unfortunate animals find that it soon produces soreness of the mouth, and reject it in consequence as being unfit for food. The sample of grain after being threshed by the Norag is often, however, mixed with particles of earth, as some of the crop has been pulled up by the roots. But as most of the wheat is consumed in the country the people do not object to a dirty sample.

The total value of one of these crops may be taken at £9 10s. per acre. The cost of raising one acre of wheat, ploughing, labour, watering, up till harvesting, may be estimated at £1 10s., and the yield may be thirty-five bushels grain and one and a half tons straw. The weight of grain per imperial bushel is sixty-four pounds, and the price per five bushels £1. Algerian and Italian wheats have been tried, and the results have been fairly encouraging.

English varieties have also been experimented with, but invariably have resulted in failure through bad germination.

BARLEY.—The native variety, Baladi, is mainly grown. The head is four-rowed, and about two and a half inches long. It is sown in November and December. Seeding, the same as for wheat. Seed. two bushels per acre. First watering, sixty days after sowing; second and last watering, fifty days after the first. Harvest commences April 15th. Reaping the same as for wheat. Cost of raising one acre, £1 5s. Yield of a good average crop, sixty bushels grain and one and a quarter tons straw. weight of grain per bushel is fifty-seven pounds, and the price ten shillings per five bushels. Total value per acre, £7 10s. The barley is fed to horses mules, donkeys, and camels, while the natives make it into bread after mixing it with wheat in equal proportions. Egyptian barley grown in the Delta is not good for malting purposes, the grain not being "plump." In 1893, by way of experiment, a few foreign varieties were grown in Egypt, principally with a view to providing a good malting sample.

Scotch Chevalier barley gave the best results. A sample from the crop of 1895, grown from seed raised in the country, was awarded the first prize for barley grown out of England at the Brewers' Exhibition, London.

The yield was not so heavy as with native barley, being as eight is to twelve; but it furnished more straw. The money value in England was Chevalier, £1 9s., as compared to 17s. for native barley; but the European barleys are more difficult to grow, and if not reaped before becoming dead ripe the heads break off and fall to the ground.

Barley is grown on the Libyan Desert (Mariout), west from Alexandria, and is entirely dependent on the rains in winter. It is sown by the Bedouins in October—to await the rains which may fall in November or December—and also after a rainfall. As the Bedouin is not an agriculturist, he scatters one and a quarter bushels per acre, and scratches the ground by the aid of a small plough, to which is yoked a camel or donkey.

This soil is of a rich yellow colour, sandy loam, fine level tracts of it extending to a thousand acres or more. To obtain a good supply of water, wells are dug to a depth of forty feet or so, and the supply is fairly good. Perennial irrigation can be resorted to by means of these wells.

If the rains are propitious, the Bedouin may reap crops of barley, with extremely varied returns, running, as they do, from two and a half to twenty bushels per acre, the price received on the spot being 15s. per five bushels. Ninety per cent. of the barley goes to England for malting.

Next come, in the rotation,

MAIZE (Nileh).—Main crop on land after cereal crops. Sown end of July. Seed, about one bushel per acre, dropped in the furrow by a boy immediately behind the plough. First watering, twenty-five days after sowing; second fifteen days after; third twelve days, fourth twelve days, fifth ten days,

sixth eight days, and seventh eight days, seven irrigations being necessary in this dry and thirsty land for the production of the crop. One cultivation is given by hand hoe after the first watering. The maize grows quickly, attaining to a height of seven feet, and occupies the ground one hundred days. Cost of raising, £2 6s. Yield per acre, fifty bushels; value, £8 10s.

Maize is a most important crop in Egypt, as upon this grain the natives depend for the bulk of their food. Ground into flour and mixed with Fenugreek seed, it is baked into bread. Five varieties of this grain are grown, but the best kinds are known by the natives as "Baladi," "Biltani," and "Nab-el-Gamal." As Indian corn is a surface feeder a liberal application of farmyard manure is neces-Harvest begins in the sary to secure a full crop. middle of November. The stalks are cut and carted to the threshing-floor. Then the cobs are pulled from the stalks and spread out to dry for thirty days, when they are put into the granaries. To separate the grain from the cobs, hand shellers are employed, or it is beaten out by sticks.

For a catch crop on land after wheat and barley, Sesame may be sown in the beginning of June. There are two varieties, the Red and the White. Six pounds of seed will sow one acre, broadcasted and ploughed in by the native implement. The duration of the growth is five months. The crop receives one hand-hoeing and five waterings. It is harvested in October before it becomes dead ripe, to prevent the shedding of seed. Sesame is grown

for the sake of the oil, which it yields to the extent of over fifty per cent. This oil is used for domestic purposes, especially by the upper class Egyptians. The production of seed per acre is about twenty-five bushels, valued at £13.

In some parts of Upper Egypt a great deal of land is sown with the Dourra (Holcus doura), which is largely consumed by the peasantry, forming, as it does, one of their staple foods. It is a very useful and suitable plant. It is sometimes eaten like maize or Indian corn in a green state, being previously roasted on the fire, or green like sugarcane. Its pith, when dried, is used as starch; while the leaves make excellent provender for cattle.

We now have to consider the last crop in the rotation, namely clover preceding cotton. As part of the land after wheat and barley has remained fallow, and advantage has been taken to level, clean, and flood with Nile water rich in deposits, "Miscowy" clover is sown broadcast, when the surface of the land is covered with three inches of water. As the water sinks into the soil the seed germinates upon the surface, which is now composed of fine silt. Sown in the middle of September, the first crop should be ready for cutting or pasturing about November 5th. During the period of growth the crop has received three waterings. Immediately after the clearing a watering is given, and the second cutting should be ready in seventy days. After eating off, the land is ploughed for the cotton crop.



ON THE NILE.

"Fachl" clover is stronger in the stem than that known as "Miscowy," and grows as a tall, luxuriant crop. It is sown amongst the stalks of the maize in the end of October, the land having previously been watered, and by the time the maize is ready for cutting, the clover has attained a height of five inches. The crop should be ready for cutting about the middle of January. Generally it is disposed of by the acre—to be cut and removed from the land, and sold in bunches to be fed to carriage horses, precisely as the green tares and clover are brought into London in bunches during the spring time of the year. The value of one cutting is £5 per acre. Unlike the "Miscowy" variety, the "Fachl" only yields one crop, as the roots fail. The land is then broken up for the crop of cotton. This finishes the three years' rotation.