

tied up separately in bunches. With a bunch clasped in one hand, take a leaf and wrap it around (beginning at the end of the bunch), confining the end under the first turn, continue to wrap smoothly and neatly until about 3 inches of the leaf remains, then open the bunch in the middle and draw the remaining part of the leaf through. This forms a neat and compact 'hand,' that will bear a great deal of handling without coming open. After the ground-leaves have been removed, the good leaves are stripped off and tied up the same as the ground-leaves, with this exception: the leaves of each stalk should be tied in a bunch by themselves, to preserve a uniformity in colour and size, as tobacco is sold in the market according to colour and size, therefore if the leaves of a large and a small plant, or of a dark-coloured and a light one, be tied up together, it at once diminishes the appearance and value of the crop."

Dennis describes stripping as being "performed by holding the plant, top down, with the left hand, while with the right hand the leaves are pulled off, taking care to have the stems all even in the hand, so that the ends are together. When 10-15 leaves have thus been grasped by the right hand, change the handful to the left hand, and with the right, select a leaf and wrap it around the stems at the end, so as to bind them altogether and cover up the ends, then split the other leaves apart with the finger, and pull the end of your wrapping-leaf through, and you have a 'hand' of tobacco. A small 'hand' of leaves, uniform in size and colour, will be found the most desirable shape to tie it in, resembling Fig. 12. The bottom leaves of the plant, and all torn and defective

leaves, should be tied up by themselves, and are known as 'lugs.' These 'hands' should be 'bulked' again, with the wrapped end out, and covered with straw, or anything that will retain the 'case,' and if subject to immediate sale, may be boxed up or hauled to market. If

FIG. 12.



Hand of Tobacco.

boxed, it should be put in tight boxes—if hauled, it should be kept covered until unloaded. Care must be taken to avoid 'high case'—extreme dampness or softness in bulking tobacco after it is stripped—as it may be 'funked' in bulk, and ruined; and it should not be packed in that condition when it is liable to remain long. It is a crop that is never off of hands."

According to Perry Hull, stripping, or, as he terms it, "picking," should not take place till about December; "at least not until the *fat stems* (main stems of the leaves, which are not thoroughly cured at the butt-end) have mostly or all disappeared, which they will have done by that time, if the crop reached maturity before harvesting. The operations of picking and assorting are by many, who make only two classes or qualities of the tobacco, carried on at the same time. By far the preferable way is, especially if there is a very

large crop to pick, to take off the leaves during damp or wet weather, tie them into bundles of 15-20 lb., with twine, and pack it away into cellars, or wherever it can be kept without drying up. It can then be assorted in any kind of weather, thus gaining considerable time, as two will pick and tie up in this way as much during one wet spell as 6 hands would, assorting and hanking up, at the same time. Another reason why the last practice is preferable is, that, by the former, the assorting can be but indifferently done; whereas, by the last, it can be done as carefully as desired. Tobacco should not be allowed to get too wet before picking; in fact, should not be allowed to get wet at all, so as to feel wet, only just damp enough to make the leaves pliable, so as to handle and pack without breaking or feeling husky. If allowed to get wet, before picking, it is next to impossible to get it dried to the proper state again so uniformly but that some of the leaves will still be too wet, while others will be dry enough to crack and break. So if the rains are long enough to get it too wet, which they often are, by all means let it remain upon the poles until the next wet spell."

Sorting.—Tobacco intended for smoking should be carefully sorted when stripped. There should be four sorts: 1st, large, equally good coloured, untorn leaves; 2nd, leaves of good size and colour, but torn; 3rd, leaves of inferior colour, and bottom leaves; 4th, refuse, shrivelled-up leaves, &c., to which may be added the suckers. No. 1 leaves, when thin, elastic, and of good sorts, are mostly valued as wrappers (outside covers) for cigars, No. 2 may also be used as wrappers, but are less valued

than No. 1 ; they are adapted for fillers and cut tobacco. The different sorts are kept separate. The best plan is to let the most intelligent man strip the leaves from the stem, and at once separate them according to quality. The leaves should then be made into hands, i. e. 10-20 leaves should be tied together by twisting a leaf round the end of the stalks, each sort being attended by a special man, to avoid mixing. The leaves of the first sort being large, 10-15 will be sufficient for a hand ; more are required of the other sorts. When making the hands of the two first sorts, each leaf is taken separately, smoothened on a flat board, and left there while another is treated in the same way, continuing thus until a sufficient number is ready to make a hand. When the hand is ready, it is laid aside, and a weight is placed upon it to keep the leaves smooth.

To sell well, according to Perry Hull, tobacco "should be assorted into three classes or grades, Wrappers, Seconds, and Fillers. The wrappers will include the soundest, best-coloured leaves, the colour (a dark cinnamon) should be as uniform as possible ; this quality should include nothing but what is fit for wrappers. The Seconds, which are used as binders for cigars, &c., will include the small top leaves, of which, if the tobacco was topped too high, there will be one or two to each plant—the bad colours, and those leaves somewhat damaged by worms and bad handling, but not so much so as to be ragged. The third class, or Fillers, will include the balance of the crop, bottom leaves, ragged leaves, &c. The tobacco should be done up into hanks of about $\frac{1}{3}$ lb. each, or about what can be encompassed by the thumb

and fingers, winding at the butt with a pliable leaf, drawing the end through the hank to secure it."

The Cuban system of sorting is described at considerable length by Mitjen, whose remarks are interpreted by Burton as follows. The operation consists in "separating one from the other the different leaves, according to their strength and quality, and dividing the produce of the crop into various classes. These are, in practice, styled *Libra*, 1st quality; *Quebrado*, 2nd quality, broken; *Injuriado de primera*; *Injuriado de segunda*, *de tercera*, *de cuarta*, *de quinta*, *de sexta*, *de setima*; *Libra de pie*, and *capadura*.

"Under this classification it is presumed that attention has been bestowed, not only to the special quality of the leaf, but also to its size, and its state, whether whole or broken; but it is very seldom that exactness is found in this classification, because but very few persons possess the requisite skill which such a complicated mode of sorting requires. Moreover, by the abuse of mixing in one heap all kinds of leaves, frequently brought in from the fields all mixed together, the proper sorting of tobacco becomes a very complicated affair.

"This kind of classification and nomenclature is, moreover, absurd, and does not positively represent fixed qualities, under the denomination of which, prices might be arranged which would serve as a guide to the merchant as well as the grower. In a word, the names, with which the different qualities of tobacco are to-day distinguished, signify nothing, and it is ridiculous to be guided in business by them. Until this kind of classification and nomenclature is changed, it is impossible to

quote the mercantile prices for the different qualities, because the name does not represent the quality; and this confusion tends greatly to the prejudice of the planter, and the merchant; and hinders attaining the perfection after which we should strive.

“We have shown that the practice of making a classification of seven *Injuriados* must not be taken as absolute. There are better modes of sorting in which a separation of 8, and even 9 *Injuriados* should be made, and others, and by far the greater proportion, in which only 5 *Injuriados* should be separated; so that the quality which, in one sorting, would appear under that of fifths—being the lowest of the crop—would be equal to eighths, or ninths, if picked more carefully; and the fifths, in a sorting, whose lowest class may be sevenths, is about equal in quality to that of thirds of other pickings, whose lowest class would be fifths, if both crops had produced equal kinds of tobacco.

“There is even more to confirm our opinion. Supposing two crops equal in all respects, and that each planter makes a separation of 7 *Injuriados*. This would not ensure that the intrinsic value of each respective quality would be equal; for each *Veguero* has his own particular mode of considering the different classes, and some make a much more careful sorting than others. In the supposed case it may happen, as it frequently does, that the *Veguero* A will take from his crop—which we will suppose to be one hundred packages—2 of the first, 3 of the second, 5 of the third, 8 of the fourth, 12 of the fifth, 30 of the sixth, and 40 of the seventh; whereas the *Veguero* B will take from his, 4 of the first, 6 of the second, 10 of the third, 16

of the fourth, 32 of the fifth, 21 of the sixth, and 11 of the seventh; and it would result, from the comparison of these two supposed pickings, that each of these classes of the *Vega A* would correspond to the immediate superior one of the *Vega B*, as will be shown on the following calculation:—

A.				B.			
		\$	\$			\$	\$
2 Bales,	1st .. at	120	= 240	4 Bales,	1st .. at	100	= 400
3 „	2nd .. „	100	= 300	6 „	2nd .. „	80	= 480
5 „	3rd .. „	80	= 400	10 „	3rd .. „	60	= 600
8 „	4th .. „	60	= 480	16 „	4th .. „	40	= 640
12 „	5th .. „	40	= 480	32 „	5th .. „	25	= 800
30 „	6th .. „	25	= 750	21 „	6th .. „	20	= 420
40 „	7th .. „	20	= 800	11 „	7th .. „	10	= 110
<u>100</u>			<u>\$3450</u>	<u>100</u>			<u>\$3450</u>

“Here it may be seen that the second of A is worth as much as the first of B, the third of A as much as the second of B, and so successively in the other classes; and as it is of importance that names should represent fixed objects, and that each quality should represent a relative value, we think that the sortings and the classifications deserve a reform, which would undoubtedly bring with it advantages to the planter, to the merchant, the manufacturer, and the consumer.

“The reform in the sortings should take its origin from a reform in the plantation or field, and principally in the manner of cutting. By observing a methodical and well-calculated system, each one of the operations prepares and facilitates the execution of the succeeding one. In its proper place, we have recommended that the

tobacco planter should not attempt to plant more than 12,000 plants for each labourer employed, so that all the plants may receive proper cultivation and attention. If all these plants are equally well taken care of, if the land has been properly prepared with manure, and all have had the same advantage of season, it is a necessary consequence that the fruit will be equally good. If afterwards the cutting or cropping is made in 3 sections, preserving always the separation we have recommended, we shall have, naturally, not a capricious assortment of leaves, but one in the order established by nature.

“None will, we think, question the fact that the pairs of leaves on one stalk must be equal in quality to those cut from an adjoining stalk, that is to say, all the crown leaves must be of the same quality, all the second also, and so successively. This admitted, we have the separation of qualities made, almost, in the field, and it only remains to separate the sizes, and the sound leaves from the torn ones, an operation which any person can make; and thus it will be unnecessary to employ those workmen who style themselves sorters, who are supposed to have an exact knowledge of the properties of each leaf. The sortings ought, therefore, to be made by classes, or by bales, each containing the separate qualities beginning with the bale of *capaduras* and *mamones*, which may be mixed together in the same bale. Of this quality, however, not more than two classes should be made, which may be called suckers and sprouts; and in the class called sprouts, the sound and larger leaves of good consistency should be placed. The result would be a *tripa* of good quality, and, after throwing away all those that are really

without substance, the remainder would form the second class, and would make a useful *tripa*, although inferior to the former.

“When these are made, the next bales should be made of tobacco chosen from the inferior class of leaves, of which 3 classes ought to be made, and called *sano*, *quebrado*, and *desecho de tercera*. In the first class of these, which we will call third quality, should be placed all the sound leaves which have any consistency; and this would form a weak *capa*, equal to that which is now called clear fifths, *quinta limpia*, and this might be called *sano de tercera*. The second class should contain the torn or broken leaves of good consistency, but not so much broken or injured as to merit only the name of shavings, as the leaves which are very much torn, or small pieces of leaves, are called. This class would be called *quebrado de tercera*, and might be used for inferior *tripa*. The last class of this quality, after throwing away all the useless leaves, would be called *desecho*.

“After this, and in the same order as the preceding, three classes should be made from the sortings for the heaps of bad seconds and thirds, and called *sano*, *quebrado*, and *tripa* of the second class. The first of these should contain all the sound leaves, and should be called *sano de segunda*, second-class sound. The second should be composed of the damaged leaves, but good for making *capa*, and should be called second-class broken; and the third, which will be the most broken, should be called second-class *tripa*.

“Finally, the picking, or sorting for the pile of pairs of crown leaves should be made; and of this quality there

should also be three classes, which will be denominated '*sano*,' '*quebrado*,' and '*tripa de corona*,' observing always the same order as was done for the piles or heaps of seconds and thirds.

"Sorting carried on in this order is so simplified that we do not doubt it might be done in one-third the time taken under the present system; and the labour of the resorters would be dispensed with, which most of the *vegueros* have now to employ and pay, as many of them do not consider themselves sufficiently expert in the matter to classify their own tobacco. This classification and nomenclature represent exact qualities to which a relative value can be fixed, and may serve as a base for mercantile transactions.

"The manufacturer will not have to contend with bales of mixed tobacco containing all the different classes which the *vega* may have produced; and he will find this division very convenient to determine the time when each class may be used without having any loss from finding in them leaves that are not seasoned, whilst others of the same bale, and perhaps of the same *manejo*, may have become deteriorated from having remained too long in fermentation. The manufacturer will, without any great trouble, be able to make the assortment for strong and weak *tripa* according to the quality of *capa* which is going to be used, a most essential point in cigar making, and thus he will be able to make cigars with all perfection. All these advantages will result from adopting the reform in the manner of sorting which we propose. And, in spite of its simplicity, it is much more positive and extensive, as it will be composed of four qualities subdivided into

eleven classes. The consumer, too, will have the advantage of being able to procure cigars manufactured completely of the quality which he prefers, and the contents of each box, or each set of boxes, will be all equal both in flavour and colour, which, under the present system, it is difficult to find. The classes will be styled:—

First quality	..	..	..	..	{	1st class Sound crown.
					{	2nd „ Broken „
					{	3rd „ Stuffing „
Second quality	..	..	..	..	{	1st class Sound seconds.
					{	2nd „ Broken „
					{	3rd „ Stuffing „
Third quality	..	..	..	..	{	1st class Sound thirds.
					{	2nd „ Broken „
					{	3rd „ Stuffing „
Fourth quality, 1st and 2nd Suckers and sprouts.						

“It is scarcely necessary to add that, according to the preceding system of sorting, only 3 divisions, cases, or rooms, with *yaguas*, will be required for depositing the respective qualities which the workmen may be assorting, until sufficient quantity has been collected in each to commence the seasoning or painting, *betumeo*, *enmannillado*, or *engavillado*, *manejo*, and *enterciadura*.

“In all kinds of sortings, the fragments of broken leaves, too small to use for cigars, should be collected, sponged, and with them packages made of *picadura*. This should be preserved, and the following year it will be useful for making *betun*. Wash the tobacco, or rather sponge it, with a solution made from these pieces of good leaves, and not with a solution made from stalks and trash of new tobacco, as some do. The wash (*betun*) has the same effect on

tobacco that yeast has on bread. It is the agent employed to produce a strong and quick fermentation, from which results that strong and agreeable aroma that may be observed in old tobacco which has been well *betumeado* (sponged with tobacco infusion). This infusion, made with fresh tobacco, is not bad if made carefully, but we consider that made with old tobacco is the best, because it instantly imparts an agreeable odour to the leaves on which it is used; and, instead of the infusion which is generally used, it would be cleaner and better, if a strong decoction was made from *picadura*—the small pieces of leaves of good tobacco—and used after it had become cold, or on the day after the boiling is made.

“If the wash is made by infusion, at least two jugs should be used to make it in, and it should be only used on the third or fourth day, renewing it as often as it appears to pass into a state of putrid fermentation, in which state it is of no use, and on which account two deposits are necessary, so that one at least may always be in a fit state to use, whilst the other is acquiring the necessary strength and a transparent golden colour, in which state it is fit for use.

“Each tobacco leaf should be dyed separately, and not, as some do, after it has been made up into *gavillas*—small bundles tied at one end of the leaf. It is very important that all the leaves should equally receive the benefit, and this is impossible when several are tied together. The good system of dyeing is used by all practical *vegueros*; to save labour some do it otherwise, to the great injury of the aroma and quality, and no small risk of the tobacco becoming spotted, and full of holes; for tobacco invariably

commences to show these spots and small holes near the heads of the *gavilla*, where the dye has not been able to penetrate owing to the manner in which the leaves are tied. Each leaf ought, therefore, to be dyed separately, as the most intelligent people do. The leaves should be placed separately in rows on a bench, having all the heads in one line; then the dye should be applied by means of a sponge, which should be soaked in the dye or infusion, and squeezed, so that a dampness only will be communicated to the leaf.

“In passing the sponge over the leaf, it should be drawn from the head or thick part near the stalk, down the large vein to the point, so that the thick vein down the centre of the leaf may receive the heaviest part of the infusion, from which the dye pushes along the transversal veins, and all parts derive benefit from it.

“After dyeing the first layer on the bench, another one is placed above this, keeping always the leaves in the same direction; and this operation is repeated, and each layer is sponged, until the pile from which they are taken is exhausted. As this new pile of dyed leaves gradually increases in height, it should be gently pressed down with the hand, and, when finished, should be covered over with green plantain leaves. This operation should be done in the morning, and by nightfall the tobacco will have acquired the necessary softness, and soaked up the infusion, so that the leaves, although very flexible, will have no signs of excess in moisture. If they have, they should be spread to dry somewhat, because, when the bundles of leaves are being tied up, they should not be excessively wet, as the result would probably be so strong a ferment-

tation that it would degenerate into a putrid one. The leaves should have a soft silkiness, but should have no positive signs of water on them after they have been dyed.

“When the tobacco is in a good state of softness, the next operation is the ‘*cabeceo*.’ This operation consists in uniting the leaves by the heads—putting them perfectly even, and joining together a uniform number of each class. The leaves should be collected in the palm of the left hand, drawing gently the right hand over all the length of each leaf from the head to the point, and tying them at the heads with a piece of *yagua* or vine, or, as most people do, by binding one of the leaves round the head of the bundle. This operation is generally made in the evening, and the following morning they should be placed in the bales, as it injures the tobacco to allow it to dry in *manojos* before putting it into bales, for, if too dry, fermentation is retarded, or is incomplete in the bales.

“We have described the manner of washing or dyeing, in making the *gavillas*, and tying them in bundles as the most practical *vegueros* do. In this part we should not, we think, advise any innovation, except that of using old seasoned tobacco instead of fresh for making the infusion, and substituting a decoction made by boiling, instead of an infusion in cold water. But we strongly advise a reform in the sorting and the classification; and a fixed number of each class of leaves should be put in each *gavilla*, as a basis from which to start all calculations for mercantile transactions. We believe, therefore, it would be convenient to fix, after the following order,

the number of leaves which each head '*gavilla*' should contain :—

First quality	..	{	Sound	25 leaves to each <i>gavilla</i>		
			Broken or torn ..	30	"	"
			For stuffing ..	40	"	"
Second quality	..	{	Sound	30	"	"
			Broken or torn ..	35	"	"
			Stuffing	43	"	"
Third quality	..	{	Sound	40	"	"
			Broken or torn ..	45	"	"
			<i>Desecho</i>		These three classes may be added with- out counting the number of leaves,	
Fourth quality	..	{	Suckers			
			Sprouts			

but making the heads (*gavillas*) of a regular uniform size ; and the *manojos* and bales of about the same size as those of 'sound' and 'broken' of the third quality, the latter weighing 100–125 lb.

“By following strictly this method, and by establishing these quantities and qualities, as a basis for all contracts, any defects found might easily be obviated ; and very exact calculations might be made of the number of cigars each bale would yield, after having examined its special condition ; and its real value might be estimated either by bales or bundles, or by weight.”

Bulking.—Bulking means placing the tobacco-leaves in heaps for the purpose of heating, in order to develop colour and flavour ; this is carried out in various ways, nearly all involving great labour and risk, as in most instances tobacco loses more or less in value during the process called “curing.” The more care is taken in raising the crop, the less attention the tobacco requires in the