CHAPTER II

TYPES OF EMPLOYMENT AND WAGES PAID IN EUROPEAN DREDGES

On May, 1964, there were 10,575 persons employed in the 64 dredges. The main difference between labour in dredges and labour in gravel pump mines is that most of the workers in the dredges are dependent workers, receiving a daily or monthly wage while labour in the gravel pump mines is employed in a variety of ways which will be described in Chapter III. The only work commonly let out to contractors is the erection of dredges, tin ore washing, and the transport of ore from the dredges to the washing sheds. Sometimes, blukar-clearing[1] is also done by contract labour although this job is usually, done by the dredge's share crew. But nowhere in Malaya does one find a dredge being entirely worked by a contract system or percentage tribute system as is so common in Chinese gravel pump mines.

a) Dependent Workers. Except for a few jobs like tin ore washing and erection of dredges which are let out to contractors, the rest of the work done in a dredging company is by its regular daily or monthly paid workers.

There are 4 main types of work performed in a dredging company. Firstly, there are the dredge crews. Second, there are the workshop employees. Third there are the outside workers and finally, there are the office staff and the store keeper. An Organisational Chart of a dredge is shown in Figure 1.1.

i) Dredge Crews. In a dredge, there is a qualified engineer who is the dredge master. His job is likewise to a captain on a ship. He issues orders and directions to the foremen on the dredge. He often makes rounds on the dredge and checks on the various parts of the dredge and decides what to do when anything serious might happen on the dredge. He is the person directly responsible to the general manager and he is paid as much as $2,000.00

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[1] Blukar-clearing means jungle clearing. The word 'blukar' means secondary 'jungle' in Malay.

FIGURE 1

ORGANISATIONAL CHART OF AN EUROPEAN DREDGE

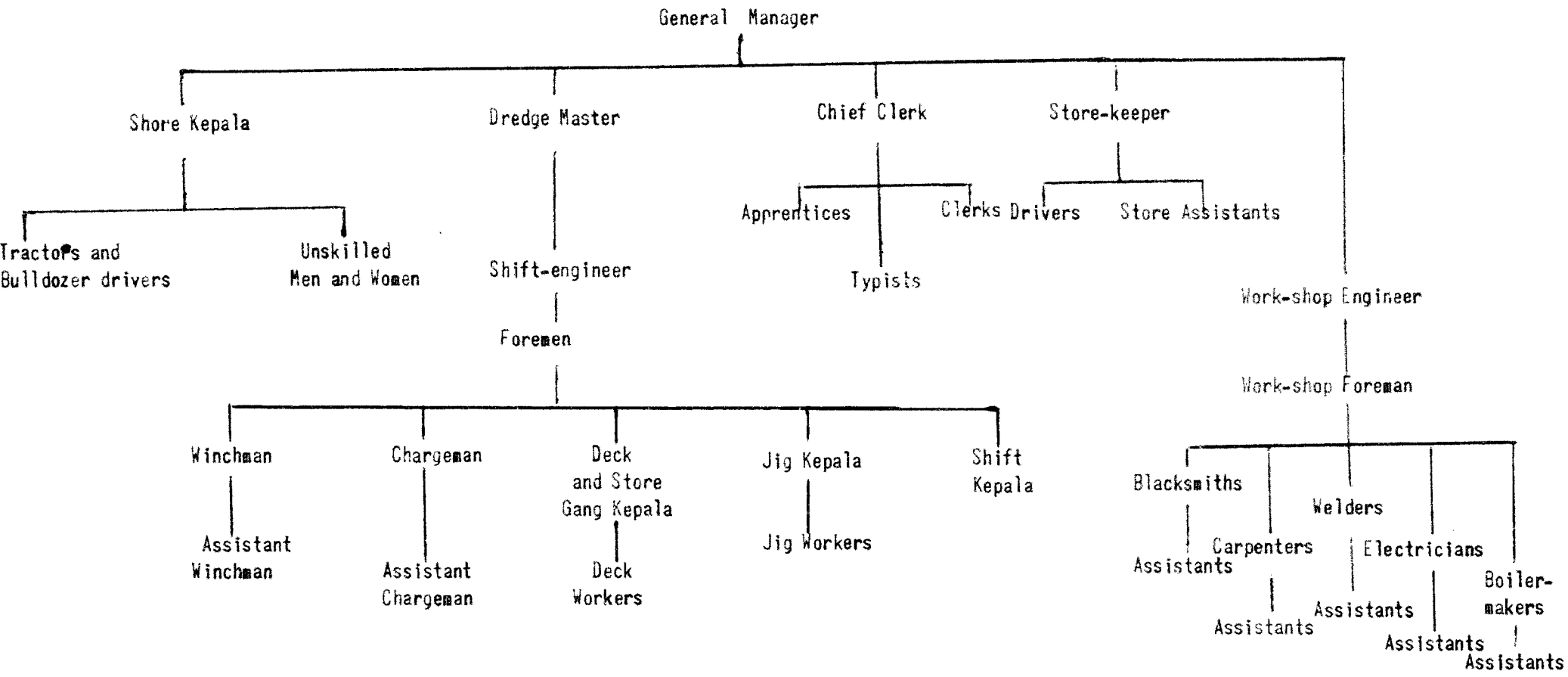

FIGURE 1

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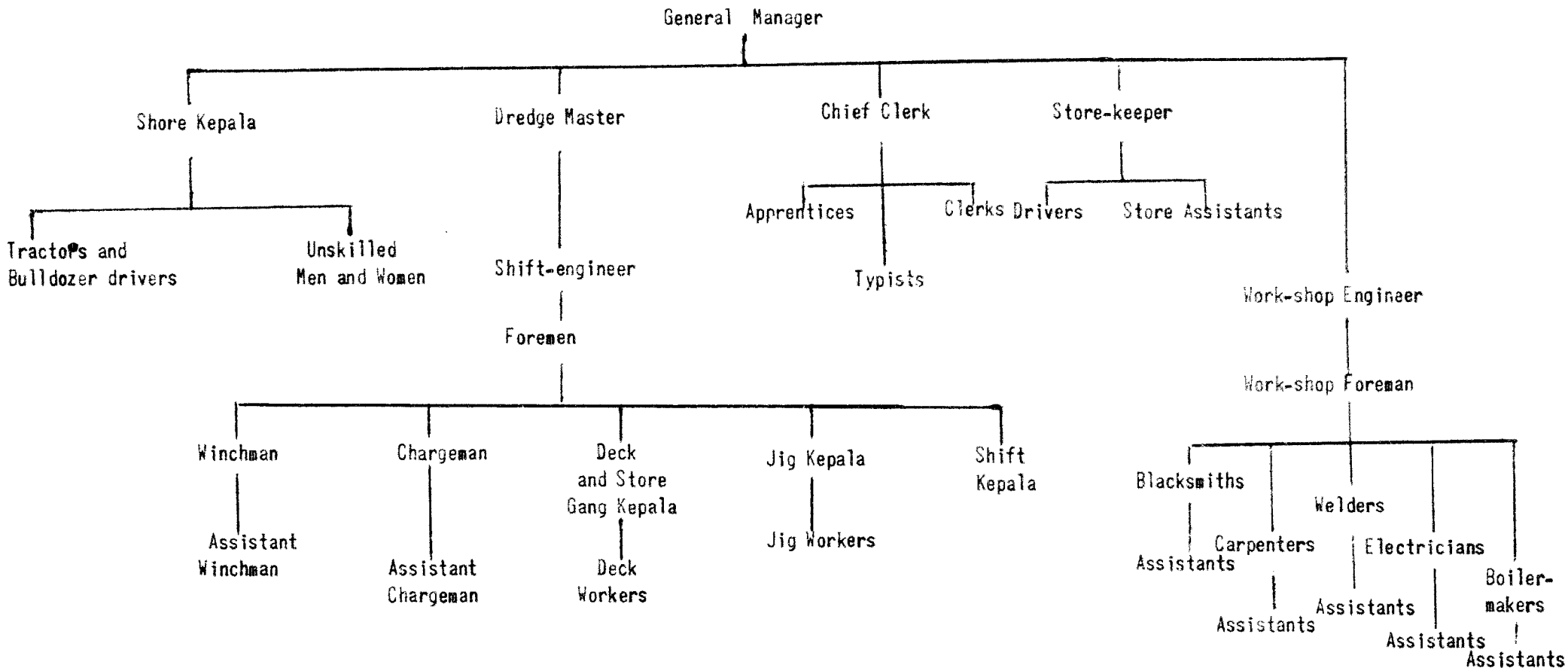

in a month, depending on his qualifications and his experience. Often he has a shift engineer to assist him because he is not often on the dredge. If he is away, the shift engineer assumes his responsibility.

A dredge continues working for 24 hours a day non-stop. These 24 hours are divided into shifts of 8 hours each. Thus in a day, there are 3 shifts working on the dredge immediately following one after another. So at any hour of the day, there would be a shift of about 25 workers working on the dredge. Each shift is taken charge of by a foreman who may or may not be qualified. Usually he is a man of experience and knows to some detail, every working part of the dredge. His job is important, and his counterpart in the gravel pump mines is the kepala. He tells the workers, whether they are skilled labourers or unskilled, what they are supposed to do. He is the person directly under the dredge master or the shift engineer, and would be responsible to the efficient functioning of the dredge during his shift. During his shift, he would make rounds on the dredge to see that his workers are doing their proper duty and are not slackening in their work. At the end of his shift, he has to ensure that everything is in perfect control and would also brief the foreman of the next shift coming after him, of what has been done and undone. Only when the next shift has arrived and his job formally taken over by the other foreman, will he leave the dredge. The wage of the foreman, which is paid monthly, is about $489.00 depending on his experience and the time he has worked on the dredge. In a particular dredge in Selangor, one foreman who has been working for a dredging company for more than 30 years, receives about $1,500.00 per month.

In every shift on the dredge, there is a Winchman. Under the directions of the shift-engineer or dredge-master, he would be responsible to move the

dredge forward, backwards, and sideways. He is, what may be called, a pilot or driver of the dredge. He also operates the controls of the chained buckets (for scoping tin bearing soil), and ensuring them to dig deeper or further away from the dredge. To move a dredge requires the manipulation of many levers and parts. Thus a winchman has about 1 or 2 assistant winchmen working with him The winchman who is classified as a skilled worker gets about $300.00 per month while his assistants who are classified as semi-skilled, get about $200.00 per month.

Today most dredges operate with electricity for power, and they employ a chargeman who is paid monthly to maintain the many wiring and electrical apparatus. He is directly under the foreman of his shift. Whenever required by the foreman or any other worker on the dredge, he has to fix lightings to any part of the dredge and to ensure that power is continuously supplied. He is classified as a skilled worker and he gets about $250.00 per month.

Directly under the foreman, among the dredge workers, there are the kepalas. They are the overseers of all the workers responsible for the general working of the dredge. Thus on a dredge in every shift there is a jig kepala, a shift kepala, a deck and store gang kepala and an outside or shore kepala. All these kepalas have about 2 to 5 workers under them depending on the types of work they have to perform. The jig kepala, for example, has about 4 workers under him looking after the operation of the 16 to 32 jigs which are usually found in a dredge. Two workers can tend up to 8 jigs at one time. They check each jig every now and then and inform the kepala if any problem might arise like a loose bolt or nut which hinder the working of the jig. The kepala usually does the minor repairs on the jig. However, in major breakdown, he calls the foreman of his shift

who would then ask for someone in the workshop to supply spare parts or to repair the jig as the case might be. If the shift engineer is around, his advice is sought and he would decide on the course of action to be done.

The shift kepala is the 'leading hand' for the workers in his shift. He knows the operation of most parts of the dredge and he directs and supervises the workers. He has no workers working directly under him but he has the authority to deal with every unskilled or semi-skilled worker on the dredge in cases of disputes or laziness. He is (as one dredge worker puts it), the 'oil' on the working parts of the dredge.

The deck and store gang kepala is responsible to see that the dredge is in 'ship' shape. He has about 3 workers with him to clear the deck of any obstructive objects like unwanted ropes, steel rods, etc. He is also responsible to make minor modifications and construct minor extensions on the dredge. He sees that lubricants and small working parts like screwdriver, spanner, etc. are available for every worker.

Finally there is the outside or shore kepala who supervises work like excavating, bulldozing, etc. on the shore. He has no connections whatsoever with work on the dredge, but he usually gets most of his instructions from the dredge master who works on the dredge.

All kepalas are paid according to their responsibilities and qualifications. For example, a kepala with a certificate from the machinery department, and who is in charge of some vital working parts on the dredge like a jig, would get more than a deck and store kepala who is not qualified. The wages of the kepalas vary from about $150.00 to $300.00 per month. The workers

under them are also paid according to their qualifications and their length of services rendered for the dredge. However, since most of them are either semi-skilled or unskilled workers, they are usually paid between $100.00 to $200.00 per month.

The dredge crews are not paid extra when they are working on night shifts because the shifts are arranged in such a way as to ensure that every worker is required to work in a night shift once in 3 days. Sometimes when there is shortage of labour because some workers are sick or are given work leave, there is opportunity for overtime work. In this case, workers who work overtime or take an extra night shift are given extra pay. The rates vary with every dredging company. Usually for every hour worked overtime, or worked in an extra night shift, a worker gets about double the ordinary pay. Some dredges employ a sliding scale method of payment for such work. For example, a worker, say gets $120.00 per month. This means he gets $4.00 in a day of 8 hours work. That is, he gets $0.50 for every hour. In the sliding scale system, if he works 2 hours overtime, he gets $1.50 for these 2 hours. If he works 4 hours overtime, he gets $4.00 and for 6 hours overtime, he gets $9.00. However, a worker is usually only given a maximum of 4 hours overtime work and the dredging company often varies the rate. During high tin prices when the company makes good profits, the rates might increase and a worker might get about $3.00 for 2 hours overtime work.

ii) Outside workers or Shore Crew. Another type of dependent workers of the dredging company is the outside workers or shore crews. They work under the shore kepala and are mostly unskilled workers. The few skilled or semi-skilled workers among them are the tractors and bulldozers drivers. The rest are unskilled men and women engaged in clearing blukar, maintaining bunds, carrying earth

etc. Many of these unskilled workers are time rated. They are usually paid about $0.50 for one hour's work. The skilled and semi-skilled shore crews are usually monthly rated. They are paid according to their degree of skill.

iii) Workshop Employees. Repairs of machinery that could not be done on the dredge are taken to the workshop which is usually situated beside the dredging company office. In the workshop there might be as many as 40 workers or more working as blacksmiths, carpenters, welders, electricians, boilermakers, etc. These may have assistants working with them. Workshop employees are classified as skilled, (e.g., carpenters, welders and blacksmith) semi-skilled, (e.g., assistant to the welders, electricians etc.) and unskilled (e.g., hammermen, and odd job labourers). In some dredging company workshop, there is sometimes a qualified engineer who is the head of the workshop and assisting him are usually 2 or 3 foremen. If there is no qualified engineer in the workshop, these foremen become the heads. These foremen are paid about an average wage of $500.00 depending on their experience and length of services with the dredging company. For working 8 hours a day, a skilled workshop employee gets about $246.00 per month, a semi-skilled employee gets $160.00 and an unskilled employee gets about $140.00.

iv) Office Staff. Another category of workers is the office staff. Usually there are about 6 persons working with the general manager for the administration of the dredge. Among the 6 persons there is the chief clerk who looks after the accounts, keeps the dredge's employees records as regards hours of work and wages paid to them and supervises in the administration of the other office staff. He is directly responsible to the manager. He gets about $400.00 to $600.00 per month depending on his qualifications. The clerks under him get about $150.00 to $350.00 per month.

Finally in the dredging company there is the storekeeper who looks after the spare parts ordered by the company. Part of his job is to keep records on the money spent on various parts and the number of parts sent to the workshop and to the dredge. He usually has about 2 or 3 assistants who are usually Indians working

as drivers to deliver the spares whenever they are wanted by the workshop or the dredge. The storekeeper gets about $500.00 a month and his assistants get about $150.00.

The Average Wage Rates, hours and days worked and Earnings for dependent Dredge Workers for 1963 are seen in Table 2.1.

b) Independent workers in European Dredges and Wages Paid. Construction of dredges and tin ore washing are the only jobs commonly left to be done by independent workers. Sometimes, work like blukar-clearing may be also left to such workers, but in recent years, this job is frequently done by the dredging company's regular daily paid workers.

i) Construction Workers. When a dredging company wishes to dismantle a dredge and construct it again over a new place after tin-ore has been exhausted by dredging operation in the present location, it calls for a contractor to do the job. The amount of money paid to the contractor (which may be as much as $2,000,000 or more) depends on the size of the dredge, the locality of the dredge and the distance from the dredge to the new place where it would be put up. The contractor brings in his gang of workers, the number of whom would depend on the time the dredging company wants the job to be completed. The faster it wants the job to be completed, the more workers the contractor would have to bring in. The whole process of pulling down a dredge and fixing it up again may take as long as 6 months or more. In this process, it involves a lot of welding, soldering, cutting, etc. All expenses in the provision of fuel, tools, spare parts, etc. are borne by the contractor. The various pieces of machinery are also transported by his own lorries.

For the erection of dredges, tenders are called for from the few construction companies that are available in the country. When a contractor is chosen,

TABLE 2.1

EUROPEAN TIN DREDGES
AVERAGE WAGE RATES, HOURS AND DAYS WORKED AND EARNINGS.[1]

Occupation	Employed Direct (D) Or Through Contractor (C)	Average Rate of Pay		Average Hours Worked in a Day	Average Days Worked in a Month	Average Monthly Earnings ($)
		Daily Rate ($)	Monthly Rate ($)			
Foreman[2]	D	-	485.00	8	26	489.00
Kepala[3]	D	-	263.00	8	26	196.00
Dredge-crews:						
Skilled[4]	D	-	276.00	8	26	251.00
Semi-skilled[5]	D	5.75	-	8	27	164.00
Unskilled	D	4.65	-	8	26	130.00
Shore-crews:						
Driver[6]	D	-	203.00	8	26½	208.00
Unskilled-Male	D	-	136.00	8	26	136.00
Unskilled-Female	D	3.95	-	8	26	107.00
Workshop-Employees:						
Skilled[7]	D	-	303.00	8	27	246.00
Semi-skilled[8]	D	5.50	-	8	27	161.00
Unskilled	D	4.50	-	8	26	139.00
Apprentice	D	4.75	-	8	26	144.00
Lorry-driver	D	-	153.00	8	28	179.00
Tin-ore Washers:						
Male	C	4.80	-	8	26½	127.00
Female	C	4.00	-	8	26	114.00

Source: Annual Report of Labour Department, Malaya.

Notes:
[1] As on July 1963.
[2] Includes Dredge, workshop, bulldozer and excavator foremen.
[3] Includes Jig, shift, deck and store gang kepalas.
[4] Includes fitters, winchmen, chargemen, welders wiremen, etc.
[5] Includes winchmen number two, steam-engine drivers and firemen.
[6] Includes excavators, bulldozers, crane and loco-drivers.
[7] Includes blacksmiths, turners, carpenters welders, electricians, moulders, boiler-makers, chargemen, etc.
[8] Includes strikers, hammermen, oil engine-drivers, and assistants to workers shown in 6. Example, assistant fitters, assistant turner etc.

he brings in his workers who are mostly very skilled in their respective work. Their wages would depend on the nature of work they perform, and the degree of skill they have. An initial sum of so much is usually paid to the contractor before work begins. This is to ensure that the contractor could use the money to have the necessary tools for his workers to work on the dredge. Also he needs money to run the lorries. Then according to the amount and extent of the job done, the dredging company would pay so much to the contractor as agreed on the contract, until the whole amount is paid, on completion of the work. The contractor often supervises the workers to see that the work is accordingly done, as loss of money and even loss of future contracts would result if the work is not finished on the stipulated date. Also the contractor would stand to lose if his workers perform work without his directions resulting in damages which he has to account for.

ii) Tin Ore Washers. Another type of work that is done by independent labour is tin-ore washing. In fact, most, if not all dredges call for a contractor to do the washing because production of tin varies from day to day. If regular workers are employed to do the job, on some days they would have practically nothing to do when there is no production (this might occur when the dredge in its operation, has to move in a new direction and at this stage, several days must elapse before tin could be obtained since the top layer of the ground in the new area usually does not contain tin. The dredge would take some time to reach the tin bearing layer). Then on other days there might be an output which the workers could not possibly cope with. When a contractor has been called to wash the tin which contains many impurities, he brings his gang of workers who usually number from 10 to 15, to transport the tin from the dredge

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to the washing sheds which are usually provided by the dredging company. Once in the washing sheds, the tin is divided into 3 chief grades, namely, grade 1, grade 2 and grade 3. The contractor is then paid according to the number of piculs of the various grades his workers can wash. Grade 1 tin requires practically no reprocessing, and the contractor is paid about $1.50 per picul of grade 1 tin processed. Grade 2 tin requires slightly more amount of work to clean it and the contractor is paid about $3.00 per picul of grade 2 tin processed. However, grade 3 tin requires a great deal of processing before it could be packed, and a contractor gets about $25.00 for every picul of grade 3 tin, his workers have washed.[2] Thus, the rate is paid according to the different grades of tin the workers have washed. The workers usually receive a fixed rate of about $150.00 per month from the contractor. They receive no food from him but sometimes when during the months when output of tin that requires washing is exceptionally large, the contractor would give them a few dollars extra every month.

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[2] These rates which are paid to tin ore washers are confirmed by Mr. Matthews, the Secretary of the Malayan Mining Employees Association.