

# Chinese Market Uses Much Low Grade Iron And Steel

## Bamboo Steel, One Of The Few "New" Materials, Is A Product Peculiar To The Chinese Trade

Even in the most active periods the trade in low-grade and scrap iron and steel with China is largely a business in small tonnages except in the case of old plates, cuttings of plates and similar materials, orders for which will run from a few hundred tons to several thousand, says the "Iron and Coal Trades Review." Profits made on the smaller lots are usually meagre. While the demand for wire shorts is perhaps the best sustained of any, buying by Chinese merchants includes such other scrap or defective materials as bar crop-ends, plate cuttings, second-hand plates, used chain, old wrought-iron horse-shoes, old files, hoop-ends, defective wire rods, old enamelled signs, old wagon tyres, tinplate wasters, tinplate waste and tinplate scrap. In new materials bamboo steel is the one product peculiar to the Chinese trade, with galvanised sheets and black sheets by the crate occasionally in active demand.

### BAMBOO STEEL

Bamboo steel, a large part of China's requirements of which had been supplied by American makers during the war, was previously supplied under popular brand names principally by German mills, which have returned to the Chinese market as the principal suppliers of this material. While the requisite quality of all the second-hand and defective material purchased is softness, so that it may be the more easily forged by hand, bamboo steel ranges from 0.65 to as high as 0.85 percent carbon, and is forged and tempered for use in cutting tools of various kinds.

In testing bamboo steel the practical method is to a great extent substituted for the scientific. No specific carbon content is demanded as a rule, the quality required being a clean break of a bar from 34 in. to 36 in. long, dropped from the height of a man's head. The name of this carbon tool steel is taken from the appearance, the manufacturer rolling the bar with joints and lines that give it the resemblance to sections of bamboo.

Although the leading American export interest now ships a small tonnage of bamboo steel to China, the sale of this product under brand names does not seem to have developed among American mills to any extent. The return of Germany to world markets has slowly edged the Amer-

ican product from China, as the market price under keen competition has slowly declined.

### GALVANISED SHEETS

In addition to bamboo steel, China is a purchaser of other new material, including galvanised wire, wire nails, mild-steel bars, black and galvanised gas pipe, galvanised sheets, and some structural material. With the exception of pipe and considerable purchases of sheets, much of the business of today goes to Continental works.

In purchasing galvanised sheets the most popular specification is 48 sheets to a 4 1/4-cwt. crate, measuring 3 ft. by 7 ft., with Nos. 38, 33, and 25 gauges; 4 ft. by 7 ft., also popular, in crates of 560 lbs.

Plain galvanised sheets are principally in demand, although corrugated material is occasionally purchased. When the sheets are finally disposed of in small lots from the warehouse, they are generally sold by the picul (133-13 lbs.). There is also a fair market for stove-pipe sheets.

In the Shanghai market quotations are generally published on the two most popular brands of galvanised plain sheets, Raven, rolled by the Grovesond Steel and Tinplate Co., Ltd., Gorseinon, Glamorgan, Wales, and the Apollo brand of the American Sheet & Tinplate Co. General classifications of English and American sheets are also made.

As in Japan, galvanised sheets are extensively used for roofing purposes and in the construction of side walls of small buildings, for storehouses and similar purposes.

### NAILS AND WIRE SHORTS

When a Chinese merchant inquires for nails the exporter correctly assumes that he is interested in purchasing countersunk, chequer-head wire nails of Birmingham wire gauge. The only other type of nail consumed in any quantity is the cut nail. Countersunk, chequer-head wire nails are used in sizes of 3/8, 1/2 and 5/8 and 1 in. to 7 in. in the Northern districts of China, supplied by the Shanghai market, and in sizes of 3/8, 7-16, 1/2 and 5/8 in. in the Southern districts, supplied through Hongkong and Canton. This difference in specifications between Northern and Southern China also appears in the method of ordering quantities, the North buying by the 100-lb. keg, the South demanding the picul keg of 133-1/3 lbs.

Since the war the trade in nails, which the American exporter enjoyed during that period and directly afterwards, has to a great extent disappeared with the return to world markets of European steel-producing countries. It is noteworthy, perhaps, that when

quake in Japan in 1923 resulted in a rather heavy demand on Chinese stocks of nails, which were the nearest available supplies for the devastated districts in Japan, practically none of the replacement business was received by American works.

This turn to European sources of supply since the war is particularly true of structural material purchases, the larger part of which are placed with European works, particularly Belgian, at prices lately many dollars a ton below the American delivered price.

Of the so-called second-hand or

defective materials purchaser wire shorts, galvanised and plain, are probably in more continuous demand than most of the other products used. A wire short generally consists of a coil of wire ranging up to 40 or 50 ft. or shorter of a standard length. Occasionally a full standard coil will be included where the wire has been found defective. Lots are assorted, various gauges being included in a single lot, as a rule.

The most usual assortment of shorts range from Nos. 6 to 16 gauge. Annealed wire shorts are in demand in gauges from Nos. 16 to 25. In wire shorts, unlike most other materials, the bulk of the trade is with the United States, where the mills make more serious efforts to meet the conditions.

The larger part of the American exports is in galvanised rather than plain shorts, the United Kingdom making a very good showing in exports of plain-wire shorts, particularly in the past few years. Shorts are used by the Chinese for a wide range of purposes where American manufacturers, working with modern machinery, regard full coils of perfect wire essential for high rates of production.

### TINPLATE WASTE WASTE

Possibly next to the wire shorts as a material in active demand by the Chinese consumer is tinplate waste waste, which has advanced to a position of relative importance in Far Eastern trade in the past year or two. Tinplate waste waste, of lower grading than tinplate wasters, but considerably better than tinplate scrap, consists of assorted gauges and sizes of plate ranging from 10 in. by 14 in. to 18 in. by 28 in. and base weights of 70 lbs. to 155 lbs. and heavier, packed as a rule in 200-lb. cases.

One of the larger American tinplate mills estimates that it has available under normal conditions about 200 tons of such material per quarter, and estimates of the annual available tonnage from all tinplate mills in the United States vary from 7,000 to 8,000 tons or more annually.

### TOOLS AND UTENSILS

The majority of the tools, household utensils and agricultural implements used in China, particularly in the interior where life is more primitive, than in the large cities, are hand-forged from scrap, providing a demand by importers in Shanghai and other ports, who distribute to the local locksmith or householder.

In these small lots of all kinds of scrap and defective iron and steel the prime requisite is sufficient softness to permit working by hand. Second-hand plates, plate cuttings, bare rop ends, hoop ends, and round, square, and semi-hard cobbles are popular.

From such raw materials the Chinese workman fashions spikes, knives, often with an edge of bamboo steel, digging forks, hoes and numerous other tools and utensils. About the only requirement of a piece of scrap, obviously, is softness, and sufficient area free from holes or damaging imperfections to permit its being formed into a tool at a low price.

Exporters deal with an import company operated and largely owned by British, American, German or some national other than Chinese. The business, says Mr. George S. Herrick, in an interesting article in "The Iron Age," is handled through foreign and native banks.

The foreign banker finances imports up to the time the material leaves for the interior buyer, while the Chinese banker finances deliveries from the time they leave the public wharf until payment has been received from the buyer at such distributing points as Nanking, Hankow, Kiukiang, Changsha, Ichang and Chungking.