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BENNO STRAUSS, OF ESSEN-BREDENEY, GERMANY, ASSIGNOR TO FRIED. KRUPP AKTIENGESELLSCHAFT, OF ESSEN-ON-THE-RUHR, GERMANY.

STEEL ALLOY.

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This invention relates to steel-alloys with 18 to 30 per cent of chromium and 20 to 4 per cent of nickel to be used for manufacturing articles (vessels, pipes, machinery parts etc.) which require a high resistibility against the attacks by sulphurous acid at a high temperature and high pressure, and it resides in that the said steel alloys contain 2 to 4 per cent of molybdenum and 0,1 to 0,4 per cent of carbon.

I am aware that chromium-nickel-steel alloys are already well-known which possess a high resistibility against the attack of acids. I am further aware that chromium-nickel steel alloys with small additions of tungsten are already well known which possess a high resistibility against the attack of sea water. However, all these alloys do not satisfy the requirements at high temperatures and high pressures such as arise, for instance, in the manufacture of cellulose. It is only by the addition of 2 to 4 per cent of molybdenum that steel alloys of this kind with 0,1 to 0,4 per cent of carbon obtain a particularly high resistibility against the attacks by sulphurous acid at a high pressure and high temperature. Besides, the said addition will give to the steel alloys excellent properties of strength.

Claim.

1. A steel alloy containing 18 to 30 per cent of chromium and 4 to 20 per cent of nickel, 2 to 4 per cent of molybdenum and 0.1 to 0.4 per cent of carbon.

2. Articles of manufacture intended for use under exposure to sulphurous acid at a high temperature and high pressure, composed of a steel alloy containing 18 to 30 per cent of chromium and 4 to 20 per cent of nickel, 2 to 4 per cent of molybdenum and 0.1 to 0.4 per cent of carbon.

The foregoing specification signed at Cologne, Germany, this 19th day of June, 1923.

BENNO STRAUSS.