

UNITED STATES PATENT OFFICE

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STEEL ALLOY

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The invention has for its object to afford a steel alloy which is adapted to resist heat and chemical influences. This object is obtained, according to the invention, by the fact, that the steel alloy contains, besides 15 to 25 per cent of chromium and 15 to 25 per cent of nickel, less than 0.2 per cent of carbon. Steel alloys have been proved to resist heat in a particularly high degree, which contain, besides 25 per cent of chromium and 20 per cent of nickel, 0.1 per cent of carbon, or alloys containing 20 per cent of chromium, 25 per cent of nickel, and 0.1 per cent of carbon. Alloys similar to these as to their content of chromium and nickel are already known; these known alloys, however, contain carbon between 0.2 and 0.8 per cent and are much less heat-proof than the present alloys. So, for instance, a steel alloy containing 15 per cent of chromium and 25 per cent of nickel resists heat up to 1150 degrees C., when containing 0.45 per cent of carbon, and resist heat up to 1300 degrees C., when containing under equal other conditions, 0.1 per cent of carbon.

What I claim and desire to secure by Letters Patent, is:—

1. A steel alloy containing 15 to 25 per cent of chromium, 15 to 25 per cent of nickel and less than 0.2 per cent of carbon.
2. A steel alloy containing 25 per cent of chromium, 20 per cent of nickel, and 0.1 per cent of carbon.
3. A steel alloy containing 20 per cent of chromium, 25 per cent of nickel, and 0.1 per cent of carbon.

The foregoing specification signed at Cologne, Germany, this 1st day of July, 1927.

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