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LAMP FILAMENT

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2 Claims. (Cl. 176—132)

This invention relates to improvements in lamp filaments, one object of the invention being the provision of an alloy of metals which when produced will have the qualities of platinum, but at an exceedingly lower cost as compared to platinum.

This filament alloy is for use in vacuum tubes and lamps, and also gas filled and gaseous lamp particularly adapted for recording apparatus for sound-on-film recording.

The alloy is composed of:—

	Percent
Nickel	33⅓ up to 90
Chromium	33⅓ down to 5
Molybdenum	33⅓ down to 5

In producing the above alloy, the desired quantities and proportions of the metals are placed in a crucible and covered with ground carbon and borax, the latter as a flux. The same is then heated, melted and mixed in the usual way until the various component metals are thoroughly commingled.

The same can then be molded in shapes or drawn into wire as may be desired.

It has been found in practice that if chromium and molybdenum are of equal amounts, that the nickel can be increased from 33⅓% up to 90% of the bulk without in any way materially changing the desired characteristics of the alloy.

Under acid and temperature tests this alloy reacts similarly to platinum, and therefore can be employed or used in the electrical or kindred arts where platinum is desirable but too expensive.

What is claimed is:

1. A lamp filament composed of nickel 33⅓% to 90%; chromium 33⅓% down to 5%; and molybdenum 33⅓% down to 5%, the chromium and molybdenum always being of equal percentages and in which the alloy thus composed has substantially the qualities of platinum.

2. A lamp filament composed of nickel, chromium and molybdenum, and in which the nickel is 33⅓% to 90%, and in which the chromium and molybdenum are always of equal percentages.

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