

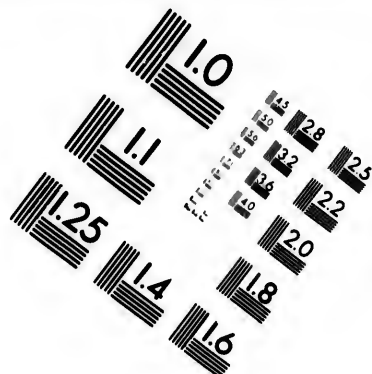
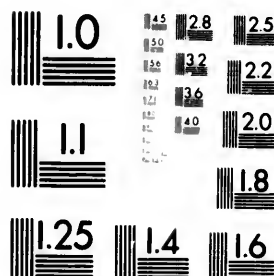
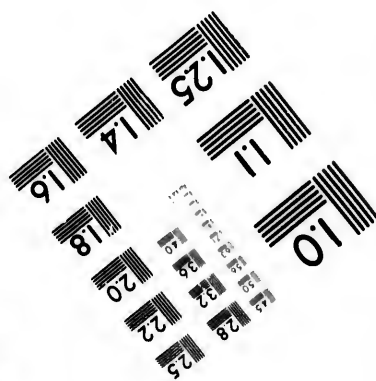
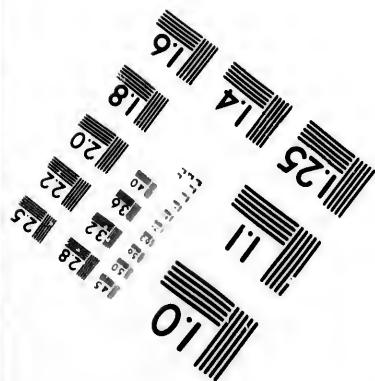


IMAGE EVALUATION TEST TARGET (MT-3)



6"



Photographic Sciences Corporation

**23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503**



**CIHM/ICMH
Microfiche
Series.**

**CIHM/ICMH
Collection de
microfiches.**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1981



Th
to

**Th
pe
of
fil**

On
be
th
sic
ot
fir
sic
or

- Th
sh
TID
wh**

**Ma
dif
en
be
rig
rec
me**

10X			14X			18X			22X			26X			30X		
									✓								
12X			16X			20X			24X			28X			32X		

The copy filmed here has been reproduced thanks to the generosity of:

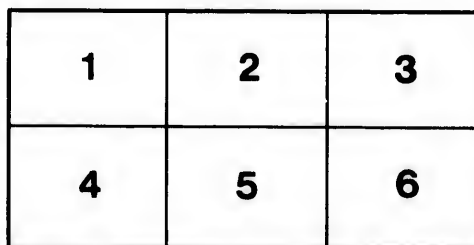
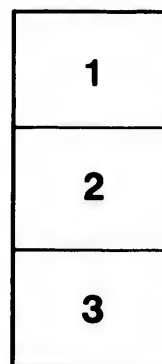
Library of the Public
Archives of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol ➡ (meaning "CONTINUED"), or the symbol ▼ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

La bibliothèque des Archives
publiques du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole ➡ signifie "A SUIVRE", le symbole ▼ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

rrata
to

pelure,
n à

Dec 40 1803

See No 21803

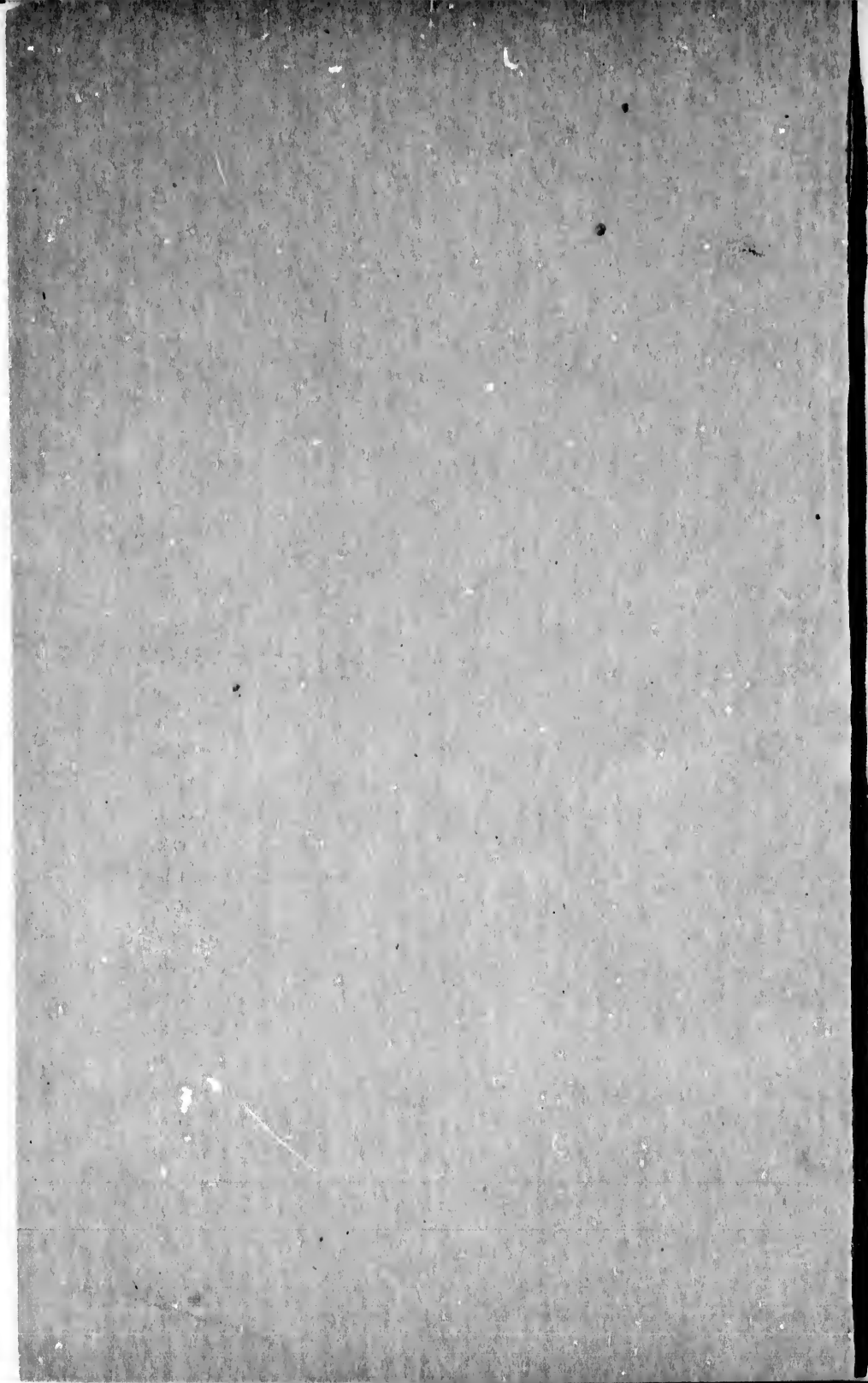
THE NICKEL QUESTION.



Shall Nickel Matte be Subjected to
an Export Duty?

H. J.

25-



THE NICKEL QUESTION.

Shall Nickel Matte be subjected to an Export Duty?

HISTORY OF THE NICKEL INDUSTRY.

The almost accidental discovery of ore bearing copper and nickel near Sudbury, Ont., during the construction of the Canadian Pacific Railway in that section of the country in 1881 and 1882, has led to the development of a locally important industry ; the life of which is seriously threatened by restrictive legislation. The developement of the first mine, namely, the Copper Cliff, situated near Sudbury, Ont., was slow and uncertain in its progress, and it was not until 1888 that the first blast furnace was put in operation. In 1889 the industry was further developed by the working of the Dominion Mineral Co. at Blezzard (one furnace), and the H. H. Vivian Co. at Murray Mine, (two furnaces), and later one furnace being operated by the Trill Mining Co., in the Township of Trill. These companies operated for the period of about three years. Since 1895 The Canadian Copper Co. has alone continued in the field, the other three companies having withdrawn, at least for a time, from active operation. During the above time The Canadian Copper Co. more than once ceased to produce matte in order to work off their stocks on hand. One of the main reasons why this Canadian industry has lived at all is because the United States Congress has permitted the importation of matte free of duty. The competitor against which the Canadian mines and smelters are struggling is the Le Nickel Co., of New Caledonia,

which company has until now smelted and refined its product in Scotland, France and Germany. Recently, however, they have seen fit to change their place of smelting to the site of the mines, namely, New Caledonia. This fact will materially lessen the cost of reducing their ores, and will make them more than ever the competitor of our Canadian companies in the markets of England and Europe, as well as the United States. This competition under former conditions has been keen enough to compel the suspension of the active operations of two strong companies in the Sudbury district. It is therefore very apparent that if this Canadian industry shall be able to meet this increased competition it is imperative that no new obstructive conditions be imposed. The Canadian ores are treated and smelted at the mines, and the product shipped in the form of matte. The reason that the matte is not further refined is because the natural and economic conditions of the district where the ore is mined has been against it. The industry was for a long time an experimental one, and at first the ores, then the matte was sent for treatment to the refineries to be treated by men who had large experience and knowledge in the treatment of refractory ores. One of the companies owning large plant and mines near Sudbury also owned and operated its own refining plant at Swansea, Wales, and are among the largest and most expert metal refiners in the world. That this company did not see fit to refine its matte in Canada when it felt the keenness of the competition necessitating the shutting down of its Canadian plant is proof that the conditions are against the profitable refining of the matte in Canada.

Then again there is practically no market in Canada for the metal and naturally the refining was done where it could be sold. The Canadian producer is in as good a position to secure the English and Continental market without as with an export duty on the matte while an export duty would debar him largely or

who
mon
whic
also
met
othe
is an
imp
imp
terfo
Can
its
than
othe
grad
of si
sulph
com
sepa
Sud
New
Can
pose
Don
Iron
it b
for
the
legis
it w
dow
can
out

wholly from the American market which is becoming yearly of more and more importance. The companies at present and which have heretofore refined copper and nickel mattes have also been refiners of copper on a large scale as well as of other metals which enables them to refine nickel cheaper than they otherwise could. The competition of the New Caledonia nickel, is an increasingly serious phase of the question and the present improvements in the methods of this foreign product makes it imperative that the domestic producers be not injuriously interfered with, if nickel mining and smelting is to survive in Canada. The New Caledonia Co. have many advantages over its Canadian competitors. Their freight rates are much lower than those of the Sudbury district, one being wholly marine the other a long inland rail road haul. Again the difference in the grade and nature of the ore the New Caledonia being a silicate of simple and easy reduction, while the Canadian is a complex sulphide more difficult and costly to mine and requiring more complicated, expensive and skillful methods of reduction and separation. The cost of producing metallic nickel from the Sudbury ore is about twice that of producing metal from the New Caledonia ore. The history of the metal industry in Canada does not show that an export duty has ever been imposed to assist in its development. The attitude of the Dominion and Provincial Governments with regard to the Pig Iron industry has been in the direction of aiding and fostering it by means of a bonus. The nickel industry has not looked for financial assistance for the establishment of any branch of the business, and it is in its best interest that no restrictive legislation be enacted against it, as owing to the keen competition it would require but very little obstruction to result in the closing down of the remaining Canadian furnaces; as evidence of this it can be pointed out that at present and for some years past four out of six Canadian furnaces have been idle.

As foreign competition has been so keen as to compel such a restriction in the Canadian industry, it may certainly be depended on that the same competition will force the location of the refineries at the point where the matte can be most cheaply refined and marketed to the best advantage. As further evidence, it can be shown that the present price of nickel is over fifty per cent. less than five years ago and values are still falling. It is possible that an export duty on nickel matte may be met by the Congress of the United States in such a manner as to largely or wholly exclude Canadian nickel from the United States. Canada would thereby lose one of her surest and best customers of this metal. Nor would the imposition of an export duty on the matte be of advantage to any new company starting in to compete in the nickel markets as under the present conditions all are free alike to enter the open markets of the world with their product.

ompel
may
force
e can
ntage.
ice of
values
nickel
States
adian
e one
d the
ge to
arkets
r the

