

46-206 C3

Published by Authority of Hon. H. H. Stevens, M.P., Minister of Trade and Commerce. Annual Bulletin 43-34-11-30 500 copies

DOMINION BUREAU OF STATISTICS - CANADA
Dominion Statistician: R. H. Coats, B.A., F.S.S. (Hon.), F.R.S.C.

Mining, Metallurgical and Chemical Branch
Chief: W. H. Losee, B.Sc.

23 **24** **25** **26** **27** **28** **29** **30** **31** **32** **33** **34** **35** **36** **37** **38** **39** **40** **41** **42** **43** **44** **45** **46** **47** **48** **49** **50** **51** **52** **53** **54** **55** **56** **57** **58** **59** **60** **61** **62** **63** **64** **65** **66** **67** **68** **69** **70** **71** **72** **73** **74** **75** **76** **77** **78** **79** **80** **81** **82** **83** **84** **85** **86** **87** **88** **89** **90** **91** **92** **93** **94** **95** **96** **97** **98** **99** **100** **101** **102** **103** **104** **105** **106** **107** **108** **109** **110** **111** **112** **113** **114** **115** **116** **117** **118** **119** **120** **121** **122** **123** **124** **125** **126** **127** **128** **129** **130** **131** **132** **133** **134** **135** **136** **137** **138** **139** **140** **141** **142** **143** **144** **145** **146** **147** **148** **149** **150** **151** **152** **153** **154** **155** **156** **157** **158** **159** **160** **161** **162** **163** **164** **165** **166** **167** **168** **169** **170** **171** **172** **173** **174** **175** **176** **177** **178** **179** **180** **181** **182** **183** **184** **185** **186** **187** **188** **189** **190** **191** **192** **193** **194** **195** **196** **197** **198** **199** **200** **201** **202** **203** **204** **205** **206** **207** **208** **209** **210** **211** **212** **213** **214** **215** **216** **217** **218** **219** **220** **221** **222** **223** **224** **225** **226** **227** **228** **229** **230** **231** **232** **233** **234** **235** **236** **237** **238** **239** **240** **241** **242** **243** **244** **245** **246** **247** **248** **249** **250** **251** **252** **253** **254** **255** **256** **257** **258** **259** **260** **261** **262** **263** **264** **265** **266** **267** **268** **269** **270** **271** **272** **273** **274** **275** **276** **277** **278** **279** **280** **281** **282** **283** **284** **285** **286** **287** **288** **289** **290** **291** **292** **293** **294** **295** **296** **297** **298** **299** **300** **301** **302** **303** **304** **305** **306** **307** **308** **309** **310** **311** **312** **313** **314** **315** **316** **317** **318** **319** **320** **321** **322** **323** **324** **325** **326** **327** **328** **329** **330** **331** **332** **333** **334** **335** **336** **337** **338** **339** **340** **341** **342** **343** **344** **345** **346** **347** **348** **349** **350** **351** **352** **353** **354** **355** **356** **357** **358** **359** **360** **361** **362** **363** **364** **365** **366** **367** **368** **369** **370** **371** **372** **373** **374** **375** **376** **377** **378** **379** **380** **381** **382** **383** **384** **385** **386** **387** **388** **389** **390** **391** **392** **393** **394** **395** **396** **397** **398** **399** **400** **401** **402** **403** **404** **405** **406** **407** **408** **409** **410** **411** **412** **413** **414** **415** **416** **417** **418** **419** **420** **421** **422** **423** **424** **425** **426** **427** **428** **429** **430** **431** **432** **433** **434** **435** **436** **437** **438** **439** **440** **441** **442** **443** **444** **445** **446** **447** **448** **449** **450** **451** **452** **453** **454** **455** **456** **457** **458** **459** **460** **461** **462** **463** **464** **465** **466** **467** **468** **469** **470** **471** **472** **473** **474** **475** **476** **477** **478** **479** **480** **481** **482** **483** **484** **485** **486** **487** **488** **489** **490** **491** **492** **493** **494** **495** **496** **497** **498** **499** **500** **501** **502** **503** **504** **505** **506** **507** **508** **509** **510** **511** **512** **513** **514** **515** **516** **517** **518** **519** **520** **521** **522** **523** **524** **525** **526** **527** **528** **529** **530** **531** **532** **533** **534** **535** **536** **537** **538** **539** **540** **541** **542** **543** **544** **545** **546** **547** **548** **549** **550** **551** **552** **553** **554** **555** **556** **557** **558** **559** **560** **561** **562** **563** **564** **565** **566** **567** **568** **569** **570** **571** **572** **573** **574** **575** **576** **577** **578** **579** **580** **581** **582** **583** **584** **585** **586** **587** **588** **589** **590** **591** **592** **593** **594** **595** **596** **597** **598** **599** **600** **601** **602** **603** **604** **605** **606** **607** **608** **609** **610** **611** **612** **613** **614** **615** **616** **617** **618** **619** **620** **621** **622** **623** **624** **625** **626** **627** **628** **629** **630** **631** **632** **633** **634** **635** **636** **637** **638** **639** **640** **641** **642** **643** **644** **645** **646** **647** **648** **649** **650** **651** **652** **653** **654** **655** **656** **657** **658** **659** **660** **661** **662** **663** **664** **665** **666** **667** **668** **669** **670** **671** **672** **673** **674** **675** **676** **677** **678** **679** **680** **681** **682** **683** **684** **685** **686** **687** **688** **689** **690** **691** **692** **693** **694** **695** **696** **697** **698** **699** **700** **701** **702** **703** **704** **705** **706** **707** **708** **709** **710** **711** **712** **713** **714** **715** **716** **717** **718** **719** **720** **721** **722** **723** **724** **725** **726** **727** **728** **729** **730** **731** **732** **733** **734** **735** **736** **737** **738** **739** **740** **741** **742** **743** **744** **745** **746** **747** **748** **749** **750** **751** **752** **753** **754** **755** **756** **757** **758** **759** **760** **761** **762** **763** **764** **765** **766** **767** **768** **769** **770** **771** **772** **773** **774** **775** **776** **777** **778** **779** **780** **781** **782** **783** **784** **785** **786** **787** **788** **789** **790** **791** **792** **793** **794** **795** **796** **797** **798** **799** **800** **801** **802** **803** **804** **805** **806** **807** **808** **809** **8010** **8011** **8012** **8013** **8014** **8015** **8016** **8017** **8018** **8019** **8020** **8021** **8022** **8023** **8024** **8025** **8026** **8027** **8028** **8029** **8030** **8031** **8032** **8033** **8034** **8035** **8036** **8037** **8038** **8039** **8040** **8041** **8042** **8043** **8044** **8045** **8046** **8047** **8048** **8049** **8050** **8051** **8052** **8053** **8054** **8055** **8056** **8057** **8058** **8059** **8060** **8061** **8062** **8063** **8064** **8065** **8066** **8067** **8068** **8069** **8070** **8071** **8072** **8073** **8074** **8075** **8076** **8077** **8078** **8079** **8080** **8081** **8082** **8083** **8084** **8085** **8086** **8087** **8088** **8089** **8090** **8091** **8092** **8093** **8094** **8095** **8096** **8097** **8098** **8099** **80100** **80101** **80102** **80103** **80104** **80105** **80106** **80107** **80108** **80109** **80110** **80111** **80112** **80113** **80114** **80115** **80116** **80117** **80118** **80119** **80120** **80121** **80122** **80123** **80124** **80125** **80126** **80127** **80128** **80129** **80130** **80131** **80132** **80133** **80134** **80135** **80136** **80137** **80138** **80139** **80140** **80141** **80142** **80143** **80144** **80145** **80146** **80147** **80148** **80149** **80150** **80151** **80152** **80153** **80154** **80155** **80156** **80157** **80158** **80159** **80160** **80161** **80162** **80163** **80164** **80165** **80166** **80167** **80168** **80169** **80170** **80171** **80172** **80173** **80174** **80175** **80176** **80177** **80178** **80179** **80180** **80181** **80182** **80183** **80184** **80185** **80186** **80187** **80188** **80189** **80190** **80191** **80192** **80193** **80194** **80195** **80196** **80197** **80198** **80199** **80200** **80201** **80202** **80203** **80204** **80205** **80206** **80207** **80208** **80209** **80210** **80211** **80212** **80213** **80214** **80215** **80216** **80217** **80218** **80219** **80220** **80221** **80222** **80223** **80224** **80225** **80226** **80227** **80228** **80229** **80230** **80231** **80232** **80233** **80234** **80235** **80236** **80237** **80238** **80239** **80240** **80241** **80242** **80243** **80244** **80245** **80246** **80247** **80248** **80249** **80250** **80251** **80252** **80253** **80254** **80255** **80256** **80257** **80258** **80259** **80260** **80261** **80262** **80263** **80264** **80265** **80266** **80267** **80268** **80269** **80270** **80271** **80272** **80273** **80274** **80275** **80276** **80277** **80278** **80279** **80280** **80281** **80282** **80283** **80284** **80285** **80286** **80287** **80288** **80289** **80290** **80291** **80292** **80293** **80294** **80295** **80296** **80297** **80298** **80299** **80300** **80301** **80302** **80303** **80304** **80305** **80306** **80307** **80308** **80309** **80310** **80311** **80312** **80313** **80314** **80315** **80316** **80317** **80318** **80319** **80320** **80321** **80322** **80323** **80324** **80325** **80326** **80327** **80328** **80329** **80330** **80331** **80332** **80333** **80334** **80335** **80336** **80337** **80338** **80339** **80340** **80341** **80342** **80343** **80344** **80345** **80346** **80347** **80348** **80349** **80350** **80351** **80352** **80353** **80354** **80355** **80356** **80357** **80358** **80359** **80360** **80361** **80362** **80363** **80364** **80365** **80366** **80367** **80368** **80369** **80370** **80371** **80372** **80373** **80374** **80375** **80376** **80377** **80378** **80379** **80380** **80381** **80382** **80383** **80384** **80385** **80386** **80387** **80388** **80389** **80390** **80391** **80392** **80393** **80394** **80395** **80396** **80397** **80398** **80399** **80400** **80401** **80402** **80403** **80404** **80405** **80406** **80407** **80408** **80409** **80410** **80411** **80412** **80413** **80414** **80415** **80416** **80417** **80418** **80419** **80420** **80421** **80422** **80423** **80424** **80425** **80426** **80427** **80428** **80429** **80430** **80431** **80432** **80433** **80434** **80435** **80436** **80437** **80438** **80439** **80440** **80441** **80442** **80443** **80444** **80445** **80446** **80447** **80448** **80449** **80450** **80451** **80452** **80453** **80454** **80455** **80456** **80457** **80458** **80459** **80460** **80461** **80462** **80463** **80464** **80465** **80466** **80467** **80468** **80469** **80470** **80471** **80472** **80473** **80474** **80475** **80476** **80477** **80478** **80479** **80480** **80481** **80482** **80483** **80484** **80485** **80486** **80487** **80488** **80489** **80490** **80491** **80492** **80493** **80494** **80495** **80496** **80497** **80498** **80499** **80500** **80501** **80502** **80503** **8050**

THE FERTILIZER INDUSTRY IN CANADA, 1929.

Production from plants in Canada engaged primarily in the manufacture of complete fertilizers amounted in value to \$2,258,780 in 1929, according to a report just issued by the Dominion Bureau of Statistics at Ottawa. In addition, fertilizer materials such as calcium cyanamide, ammonium sulphate, animal tankage, ground bone and fish fertilizers were made in factories classified under other industries; in 1929 the production value of these commodities totalled \$12,090,768.

Only 12 plants in Canada produced complete fertilizers as their major product during 1929; 5 were in Ontario, 2 in Nova Scotia, 3 in British Columbia, 1 in Quebec, and 1 in New Brunswick. Capital employed in these plants amounted to \$2,991,783 and the average number of persons employed for the year was 251. Payments in salaries and wages totalled 265,650 and materials used in manufacture cost \$1,450,253.

Complete fertilizer was the major product of the industry. In 1929, production amounted to 40,436 tons worth \$2,112,146 or 94 per cent of the total output of the industry. Superphosphate was actually made in only one plant although several manufacturers of complete fertilizer sold quantities of superphosphate after dilution with a filler to meet the requirements of the trade.

Production of complete fertilizer by firms in other industries amounted to 26,728 tons worth \$935,421 while ammonium sulphate, cyanamide, animal tankage, fish fertilizer and ground bone, used extensively as a fertilizer, were also produced by concerns classified in other industries. Table 2 of this bulletin gives the production in the fertilizer industry as classified for statistical purposes, and Table 3 shows the output from other industries.

Imports and exports of fertilizer materials are shown in Table 4.

The Bureau has made a special survey of the Fertilizer Trade in Canada for the year ended June 30, 1929. This bulletin gives details of sales by classes and by provinces, and may be obtained free upon request to the Dominion Bureau of Statistics at Ottawa.

Table 1.- PRINCIPAL STATISTICS OF THE FERTILIZERS INDUSTRY IN CANADA, 1925 - 1929.

| Year | No. of plants | Capital employed | Average number of employees | Salaries and wages | Cost of materials at works | Selling value of products at works | Value added by manufacturing |
|------|---------------|------------------|-----------------------------|--------------------|----------------------------|------------------------------------|------------------------------|
| 1925 | 13 | \$2,095,608 | 201 | \$205,173 | \$1,045,294 | \$1,487,787 | \$392,495 |
| 1926 | 12 | \$1,891,054 | 221 | \$210,427 | \$1,047,641 | \$1,449,589 | \$401,948 |
| 1927 | 12 | \$1,998,811 | 233 | \$224,564 | \$1,200,030 | \$1,844,032 | \$644,002 |
| 1928 | 12 | \$2,131,905 | 251 | \$281,109 | \$1,446,800 | \$2,189,986 | \$743,186 |
| 1929 | 12 | \$2,901,783 | 251 | \$265,650 | \$1,450,253 | \$2,258,780 | \$806,527 |

Table 2.- PRODUCTS OF THE FERTILIZERS INDUSTRY IN CANADA, 1928 and 1929.

| Products made | Unit of measure | 1928 | | 1929 | |
|-----------------------------|-----------------|----------|------------------------|----------|------------------------|
| | | Quantity | Selling value at works | Quantity | Selling value at works |
| Complete fertilizer..... | ton | 53,799 | \$1,990,650 | 48,456 | \$2,113,146 |
| All other products (x)..... | " | ... | \$199,156 | ... | \$145,634 |
| TOTAL..... | " | ... | \$2,189,986 | ... | \$2,258,780 |

(x) Includes superphosphate, bone meal, etc.

Table 3.- PRODUCTION OF FERTILIZERS AND FERTILIZER MATERIALS IN OTHER INDUSTRIES, 1928 and 1929.

| Industry | Product | Unit of measure | 1928 | | 1929 | |
|-------------------------------|-----------------------------------|-----------------|----------|------------------------|----------|------------------------|
| | | | Quantity | Selling value at works | Quantity | Selling value at works |
| Cyanamide | - Calcium cyanamide..... | ton | 150,186 | \$4,926,541 | 252,005 | \$8,665,097 |
| Slaughtering and Meat Packing | - Animal tankage..... | ton | 15,482 | \$761,271 | 14,682 | \$751,298 |
| | Bone, raw, ground..... | ton | 4,339 | \$196,863 | 3,552 | \$176,797 |
| | Complete fertilizers..... | ton | 20,381 | \$944,818 | 24,828 | \$910,421 |
| Fisheries | - Fish and whale fertilizers..... | ton | 10,419 | \$142,848 | 12,576 | \$218,202 |
| Coke and Gas | - Ammonium sulphate..... | ton | 28,090 | \$1,108,744 | 34,141 | \$1,293,952 |
| Adhesives | - Complete fertilizers..... | ton | 2,000 | \$82,000 | 1,900 | \$75,000 |
| | TOTAL..... | ton | 218,897 | \$8,162,835 | 343,684 | \$12,090,768 |

Table 4.- IMPORTS INTO CANADA AND EXPORTS OF FERTILIZER MATERIALS, CALENDAR YEARS 1928 and 1929.

| Imports | Unit of measure | 1928 | | 1929 | |
|---|-----------------|----------|-------------|----------|-------------|
| | | Quantity | Value | Quantity | Value |
| Tankage..... | ton | 1,617 | \$59,780 | 1,506 | \$57,307 |
| Bone dust, charred bone, bone meal, and bone flour..... | ton | 3,197 | \$199,669 | 2,410 | \$152,918 |
| Fish offal or refuse..... | ton | 585 | \$4,693 | 774 | \$15,143 |
| Ammonium sulphate..... | ton | 5,510 | \$174,899 | 1,723 | \$80,019 |
| Basic slag, crushed or ground..... | ton | 13,980 | \$122,385 | 13,626 | \$181,028 |
| Cyanamide..... | ton | 55 | \$2,304 | 132 | \$7,075 |
| Kainite and other German potash salts..... | ton | 203 | \$5,694 | 603 | \$7,199 |
| Potash, muriate of, crude..... | ton | 33,855 | \$842,988 | 17,001 | \$611,121 |
| Potash, sulphate of, crude..... | ton | 997 | \$50,167 | 903 | \$43,277 |
| Soda, nitrate of..... | ton | 26,720 | \$1,204,017 | 33,878 | \$1,419,647 |
| Fertilizers, superphosphate..... | ton | 97,489 | \$1,188,537 | 97,925 | \$1,147,839 |
| Fertilizers, compounded or manufactured, n.e.o.p..... | ton | 58,209 | \$1,428,850 | 43,517 | \$1,114,518 |
| Exports | | | | | |
| Tankage..... | ton | 13,580 | \$617,060 | 13,765 | \$614,921 |
| Bone dust and meal..... | ton | 1,2 | \$83 | 2 | \$75 |
| Fish meal..... | ton | 16,850 | \$925,000 | 16,223 | \$826,860 |
| Fish offal or refuse..... | ton | 1,675 | \$81,497 | 1,470 | \$64,772 |
| Ammonium sulphate..... | ton | 13,632 | \$561,696 | 24,489 | \$909,510 |
| Cyanamide..... | ton | 155,526 | \$4,759,810 | 192,929 | \$6,436,519 |
| Fertilizers, manufactured..... | ton | 2,286 | \$49,330 | 4,289 | \$106,695 |

STATISTICS CANADA LIBRARY
BIBLIOTHÈQUE STATISTIQUE CANADA



1010650687